CONNECTING GLOBAL WORK TO UTAH'S FUTURE

UNESCO CHAIR ON AI AND ENVIRONMENTAL STEWARDSHIP FOR SUSTAINABLE FUTURES

UNESCO CHAIR REPORT

AUGUST 2025 ISSUE

unesco Chair

UVU

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WELCOME TO THE UNESCO CHAIR AT UVU

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Welcome to the UNESCO Chair at Utah Valley University. Since our official launch in March 2025, we have been advancing projects that connect our students and faculty to the world while bringing unique value back to Utah. In keeping with our mission of connecting global work to Utah's futures, these projects developed in Peru, Dominican Republic, Cambodia, and Indonesia are already opening new doors for global engagement that strengthens learning beyond the classroom.

This report highlights current and upcoming initiatives, including our growing pipeline of projects such as work on artificial intelligence, environmental stewardship and sustainable futures. Through these efforts, UVU students gain opportunities to engage in global fieldwork while applying their knowledge in ways that directly enrich our local community. By challenging students to think and act as global citizens with a Utah focus, the Chair serves as a bridge between our teaching mission and the wider world.

We invite you to explore these pages, where the voices of our students and faculty illustrate how the UNESCO Chair is creating impact both at home and abroad.

- Baldomero Lago, UNESCO Chair Director
- Maritza Sotomayor, UNESCO Chair Assosciate Director

MISSION STATEMENT

The UNESCO Chair at UVU on AI and Environmental Stewardship for Sustainable Futures advances the integration of artificial intelligence and sustainability in education to improve learning, empower faculty, and support student-led initiatives. Through collaboration with Global South partners and K–12 institutions, the Chair promotes environmental stewardship, intercultural dialogue, and the development of resilient, inclusive education systems that prepare learners for a sustainable future.

OBJECTIVES

1. Integrate sustainability education into curricula, support student-led initiatives, and foster K-12 partnerships for environmental stewardship.

2. Foster global partnerships with Global South institutions for intercultural dialogue, collaborative research, and enriching exchange programmes.

3. Provide faculty with AI tools and sustainability training to enhance teaching and drive innovation in education.

4. Implement AI-driven adaptive learning systems to enhance student engagement, personalise learning, and improve course completion rates.

5. Cooperate closely with UNESCO, other UNESCO Chairs and UNITWIN Networks on relevant programmes and activities.

CONNECTING GLOBAL WORK WITH

UTAH'S FUTURE

A UVU UNESCO CHAIR ON AI AND ENVIRONMENTAL STEWARDSHIP FOR SUSTAINABLE FUTURES

PURPOSE: *Clearly positions the Chair as both global in scope and locally relevant to Utah's mission of public education and community engagement.*

WHAT IS THE UNESCO CHAIR AT UVU?

UTAH VALLEY UNIVERSITY IS ONE OF FEWER THAN 30 U.S. INSTITUTIONS AWARDED A UNESCO CHAIR.

This rare distinction empowers UVU to lead globally engaged education that integrates AI, sustainability, and inclusive partnerships with the Global South—enhancing teaching, research, and public impact at home.

FIRST UNESCO CHAIR EXECUTIVE BOARD MEETING

March 26, 2025

The first Executive Board meeting of the UVU UNESCO Chair on AI and Environmental Stewardships for Sustainable Futures marked a key moment in launching academic projects focused on sustainability and innovation. Faculty members from various colleges within the university gathered to propose project ideas aligned with their research fields, fostering interdisciplinary collaboration. This meeting set the stage for initiatives that tackle both local and global challenges related to AI and environmental stewardship.

As a result, two subcommittees were formed: one on AI and Education, and the other on Social and Environmental Sciences. These groups will work on projects with global partners and universities, leveraging funding and promoting collaboration. The UNESCO Chair serves as a platform to connect UVU faculty with researchers worldwide, and the board looks forward to the exciting possibilities ahead.

EXECUTIVE BOARD

Dr. Baldomero Lago

UNESCO CHAIR, DIRECTOR
CHIEF INTERNATIONAL OFFICER
GLOBAL ENGAGEMENT

Dr. Maritza Sotomayor

UNESCO CHAIR, ASSOCIATE DIRECTOR
THE WOODBURY SCHOOL OF BUSINESS
ECONOMICS

Dr. Adam Ogurlu

SCHOOL OF EDUCATION
ELEMENTARY EDUCATION

Dr. Carl Canlas

SMITH COLLEGE OF ENGINEERING
AND TECHNOLOGY
INFORMATION SYSTEMS

Dr. Hilary Hungerford

COLLEGE OF SCIENCE
EARTH SCIENCE

Dr. Yi Yin

COLLEGE OF HUMANITIES AND SOCIAL
SCIENCES
BEHAVIORAL AND SOCIAL SCIENCES

Dr. Cheung Chau

SCHOOL OF THE ARTS
DEPARTMENT OF MUSIC

Dr. Kevin McCarthy

COLLEGE OF HEALTH AND PUBLIC
SERVICES
EMERGENCY SERVICES

Dr. Kathren Brown

ACADEMIC AFFAIRS
DEPUTY PROVOST

Kaisè McLane

UNESCO CHAIR ADMINISTRATIVE
ASSISTANT

Felipe Queipo

UNITED NATIONS ADVISOR

UNESCO CHAIR COMMITEE ON

AI AND EDUCATION

MEETING

The Committee on AI and Education explored innovative ways to integrate AI into educational tools, emphasizing the need to equip teachers with the skills to model AI use for future leaders. The meeting welcomed members Yi Yin, Carl Canlas, and Adam Ogurlu, representing diverse academic institutions. Key discussions centered on the UNESCO CHAIR's objectives, including sustainability education, student-led initiatives, and fostering global partnerships with Global South institutions for research and exchange. Ongoing projects address AI's impact on higher education, digital equity, and AI-driven teaching tools. The committee also highlighted ethical AI, responsible implementation, and potential collaborations with international partners.

UNESCO CHAIR COMMITTEE ON AI – VISION

The AI Committee supports the development of globally informed, equity-focused educational practices through the ethical use of artificial intelligence. In alignment with the Chair's mission to engage with the Global South, the committee shall:

- *Promote faculty-led projects that implement AI-driven adaptive learning systems designed to increase student engagement, improve personalization, and enhance completion rates, especially for diverse learning needs*
- *Support professional development for faculty integrating AI tools into their teaching and research in ways that respond to global sustainability and inclusion challenges*
- *Encourage research and exchange activities that explore how AI can support equitable access to education in both local and Global South contexts, fostering comparative insight and shared innovation.*

AI COMMITTEE MEMBERS

Adam Ogurlu - Assistant Professor - Elementary Education

Armen Ilikchyan - Associate Professor - Technology Management

Bing Han - Assistant Professor - Elementary Education

Carl Canlas - Assistant Professor - Information Systems

Emily Hedrick - Associate Professor - Web Design and Development

Kelsey Hixson-Bowles - Assistant Professor- English and Literature

Krista Ruggles - Associate Professor - Elementary Education STEM

Laurie Toro - Director - Faculty Development

Majid Memari - Assistant Professor - Computer Science

Matt North - Professor - Information Systems

Evelyn Porter - Professional in Residence - Strategic Management

Susan Thackeray - Associate Professor - Technology Management

Yi Yin - Assistant Professor - Social & Behavioral Sciences

UNESCO CHAIR COMMITTEE ON ENVIRONMENTAL STEWARDSHIP - VISION

The Environmental Stewardship Committee promotes ecological education and applied sustainability learning with an emphasis on international collaboration. Within the framework of the Chair's Global South focus, the committee shall:

- *Advance the integration of sustainability into curricula across disciplines, enabling UVU students to understand global environmental challenges through a local–global lens.*
- *Encourage faculty-led projects that engage students in research, service learning, or communication efforts connected to environmental priorities in Global South communities.*
- *Support K–12 outreach and community engagement initiatives that link local stewardship with global environmental perspectives, emphasizing the shared nature of ecological responsibility.*

UNESCO CHAIR COMMITTEE ON SUSTAINABLE FUTURES - VISION

The Sustainable Futures Committee guides the Chair's strategic direction, with a focus on long-term partnerships and global equity. With particular emphasis on collaboration with the Global South, the committee shall:

- *Facilitate faculty-led initiatives that foster sustained partnerships with institutions and organizations in Global South countries, centered on intercultural dialogue, joint research, and reciprocal exchange.*
- *Promote interdisciplinary projects that position students as active participants in addressing sustainable development challenges through comparative and globally engaged frameworks.*
- *Strengthen institutional ties to the broader UNESCO network, including UNITWIN partners, by coordinating collaborative activities, shared outputs, and mutual learning with global peers.*

SUSTAINABLE FUTURES COMMITTEE MEMBERS

Kevin McCarthy - Associate Professor - EMS

Lynn Farley - Assistant Professor - Occupational Therapy

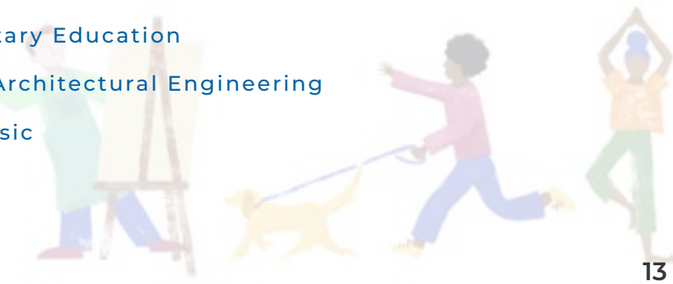
Maria Blevins - Associate Professor - Communications

Alexa Geist - Professor - Public Health

Vessela Ilieva - Professor - Elementary Education

Aliki Milioti - Assistant Professor - Architectural Engineering

Cheung Chau - Professor - Arts/Music



CURRENT PROJECTS

COLLEGE OF HEALTH AND PUBLIC SERVICES

EMERGENCY SERVICES
"CAMBODIA SANITATION PROJECT"
Faculty lead: Kevin McCarthy, Alexis Geist
CAMBODIA

EMERGENCY SERVICES
"EMS TRAINING PROJECT"
Faculty lead: Kevin McCarthy, Steve Allred, Ben Williams, Jeanette German
DOMINICAN REPUBLIC

OCCUPATIONAL THERAPY
"BUILDING THE CAPACITY AND CONFIDENCE OF FAMILIES LIVING WITH CHILDREN WITH DISABILITY"
Faculty lead: Lynn Farley
INDONESIA

COLLEGE OF SCIENCE

EARTH SCIENCE, BIOLOGY, CHEMISTRY
"BUILDING BRIDGES: COLLABORATIVE SOLUTIONS FOR WATER SUSTAINABILITY BETWEEN PERU AND UTAH"
Faculty lead: Eddy Cadet, Lauren Brooks, Sally Rocks, Weihong Wang, Hilary Hungerford, Mark Shurtleff, Matt Olson, Alessandro Zanazzi
PERU

KEVIN MCCARTHY

BEN WILLIAMS

STEVE ALLRED

JEANETTE GERMAN

EMS TRAINING PROJECT

DOMINICAN REPUBLIC

EMS TRAINING IN THE DOMINICAN REPUBLIC

EMERGENCY SERVICES
COLLEGE OF HEALTH & PUBLIC SERVICES

UVU FACULTY AND STUDENTS BRING EMS TRAINING TO THE DOMINICAN REPUBLIC

A team of faculty and administrators from Utah Valley University (UVU) recently traveled to the Dominican Republic as part of an initiative to provide emergency medical services (EMS) training. Led by Jeannette German, Steve Allred, and Ben Williams, the project aims to offer clinical experiences for UVU students, deliver critical medical training to local communities, and foster cultural exchange.

KEY OBJECTIVES

The Dominican Republic EMS project has been in development for four years, initiated through Jeannette German's professional connections with the Dominican Republic. After extensive planning and coordination, the team recently conducted a site visit to solidify partnerships and assess training needs.

Their objectives included three key goals:

1. Providing US students with clinical experiences that count toward their required hours and skills development.

2. Delivering service projects that include CPR and medical training for local communities.

3. Offering cultural immersion opportunities to enrich students' understanding of global healthcare practices.

CPR TRAINING AND COMMUNITY ENGAGEMENT

One of the most impactful aspects of the trip was the team's CPR training sessions. Over 240 individuals received instruction, including 172 university students interested in Basic Life Support (BLS) training, 22 hotel employees in La Romana, and dental, nursing, and physical therapy students at Universidad Católica Santo Domingo.

While official certification was not possible due to the unexpectedly high number of participants and the nature of the training, many students expressed a strong desire to pursue further certification in the future.

Their enthusiasm was remarkable, with many staying an extra 1.5 to 2 hours beyond the scheduled training time to continue learning. Several students even shared their excitement with the university's Rector, expressing how much they enjoyed the sessions and eagerly asking when the UVU team would return to teach again. Universidad Católica provided professional photography and warm hospitality, further cementing the partnership between UVU and the local institutions.

FRIENDSHIP AND COLLABORATION

A special highlight of the trip was the extraordinary hospitality of the university's Rector, Rev. Jose Luis de la Cruz.. As both a religious leader who holds mass and

fulfills ecclesiastical duties and the equivalent of a university president, his time is highly valuable. Despite his demanding schedule, he took an entire day to personally drive the UVU team to small neighboring towns, markets, and local sights. His warmth and generosity left a lasting impression on the team, as did his willingness to fully engage in the experience—even participating in some of the CPR training sessions himself. His enthusiasm and hands-on approach reflected the welcoming spirit of Universidad Católica and the Dominican hosts, whose kindness and support were invaluable to the success of the trip. The UVU team remains deeply grateful for their time, generosity, and commitment to fostering global collaboration.

Additionally, the collaboration between UVU and Universidad Católica Santo Domingo was strengthened through shared experiences and mutual appreciation. The exchange of Emergency Services and Global Engagement items, such as UVU swag, became a fun and symbolic gesture of the growing friendship between the two institutions. Faculty, staff, and students on both sides expressed gratitude for the opportunity to connect. This sense of camaraderie and mutual respect reinforces a partnership that will continue to flourish through future projects and training initiatives.

Pictured from left to right:

- *Ing. José Armando Tavarez Rodríguez - Vice President of Research Engagement and Quality Assurance*
- *Dilenia Lizardo Barrera - Director of Research*
- *Omar Díaz - Dean of Health Sciences*
- *Inmaculada Estévez - Director of the School of Nursing*
- *Inmaculada Torres - Academic Vice President*
- *Francisco Hernández - Vice President of Administration and Finance*
- *Rev. José Luis De La Cruz - President*
- *Jeannette Vargas German - UVU EMS Lab Manager*
- *Ben Williams - UVU EMS Adjunct*
- *Steven D. Allred - Paramedic Program Director / Professor EMS*

HOSPITAL PARTNERSHIPS AND CLINICAL EXPERIENCE OPPORTUNITIES

The UVU team secured arrangements with two hospitals to facilitate clinical experiences for their students. Padre Bellini Hospital, a public institution, approved UVU student participation with the support of a key hospital decision-maker. Meanwhile, CEDIMAT, a private hospital with English-speaking staff and American-style operations, became an ideal training site for students focusing on airway management and labor/delivery. Although language barriers posed some challenges, students engaged in skill-based learning rather than full clinical rotations. Additionally, hospital physicians expressed interest in developing pre-hospital care systems with UVU's guidance, opening doors for future collaborations.

Training session with hotel employees

EXPANDING CPR TRAINING TO LA ROMANA'S HOTEL EMPLOYEES

Making the most of their time in the Dominican Republic, the UVU team also provided CPR training sessions for hotel employees at the resort where they were staying in La Romana. The hotel manager and employees were incredibly enthusiastic about the opportunity to learn basic life-saving skills, despite the fact that attendance was neither required nor compensated. Their eagerness to participate highlighted the widespread interest in emergency preparedness and further emphasized the importance of these training initiatives. The UVU team was impressed by the employees' commitment to learning and their engagement in the sessions, further reinforcing the value of expanding CPR education across different community sectors.

GOALS MOVING FORWARD

Beyond immediate training and hospital partnerships, UVU's involvement in the Dominican Republic holds long-term potential. Future initiatives may include supporting Dominican institutions in strengthening their EMS education programs, conducting research collaborations to enhance pre-hospital care practices, and continuing to develop professional development opportunities for both UVU and Dominican students. The Basic Spanish Medical Assessment Guide, created by Jeannette Vargas German, has been incredibly well-received by participants. Its availability in both Spanish and English has made it an invaluable resource for students and professionals alike.

Jeannette German at the Universidad Católica Santo Domingo

Short-term goals include bringing more students to the Dominican Republic, donating medical supplies, and providing ongoing CPR and medical training. In the long term, the focus will shift to developing and enhancing the Dominican EMS program, improving ambulance services, and further advancing pre-hospital care strategies.

“Several students even shared their excitement with the university’s Rector, expressing how much they enjoyed the sessions and eagerly asking when the UVU team would return to teach again.”

-Steve Allred

The Dominican Republic EMS project has already proven to be a meaningful and impactful initiative, successfully fostering hands-on learning, cross-cultural exchange, and medical training. This achievement would not have been possible without the dedication and leadership of faculty members and enthusiasm of the participating students. Deep gratitude is also extended to the partners in the Dominican Republic, including Universidad Católica Santo Domingo, its Rector, and hospital staff, whose hospitality and commitment to collaboration made this experience truly special. As UVU looks ahead, there is great anticipation for further training opportunities, and the ongoing development of emergency medical services in the Dominican Republic.

DR. LAUREN BROOKS

DR. EDDY CADET

DR. SALLY ROCKS

BUILDING BRIDGES:

COLLABORATIVE SOLUTIONS FOR WATER SUSTAINABILITY BETWEEN PERU AND UTAH

PARTICIPATING UNIVERSITIES

Universidad Nacional de Educación
Universidad Nacional de Huancavelica
Universidad Nacional de Trujillo
Universidad Nacional del Altiplano
Universidad Nacional del Santa

MUNICIPALITIES

Chosica
Santa Eulalia
Trujillo
Puno

MEETING WITH THE CONGRESS OF PERU

The session was broadcast live and can be found on YouTube

March 26, 2025

During their visit to Peru, researchers from Utah Valley University (UVU) met with the Congress of Peru to discuss their water testing project, which examines the quality of Lake Titicaca, the Rímac River, and the springs of surrounding municipalities. The event provided an opportunity for government officials and community members to engage in a Q&A session with the researchers, fostering dialogue on water safety and environmental sustainability. We are grateful for the support of the Peruvian government in our efforts to promote cleaner water for local communities.

MEETING AT THE NEU

The trip started with a visit to the Universidad Nacional de Educación (NEU). Researchers had the honor of meeting with the Rector Dr. Lida Salcedos, President of the National Rectors Association of Peru. We are grateful for the collaboration that took place with this university.

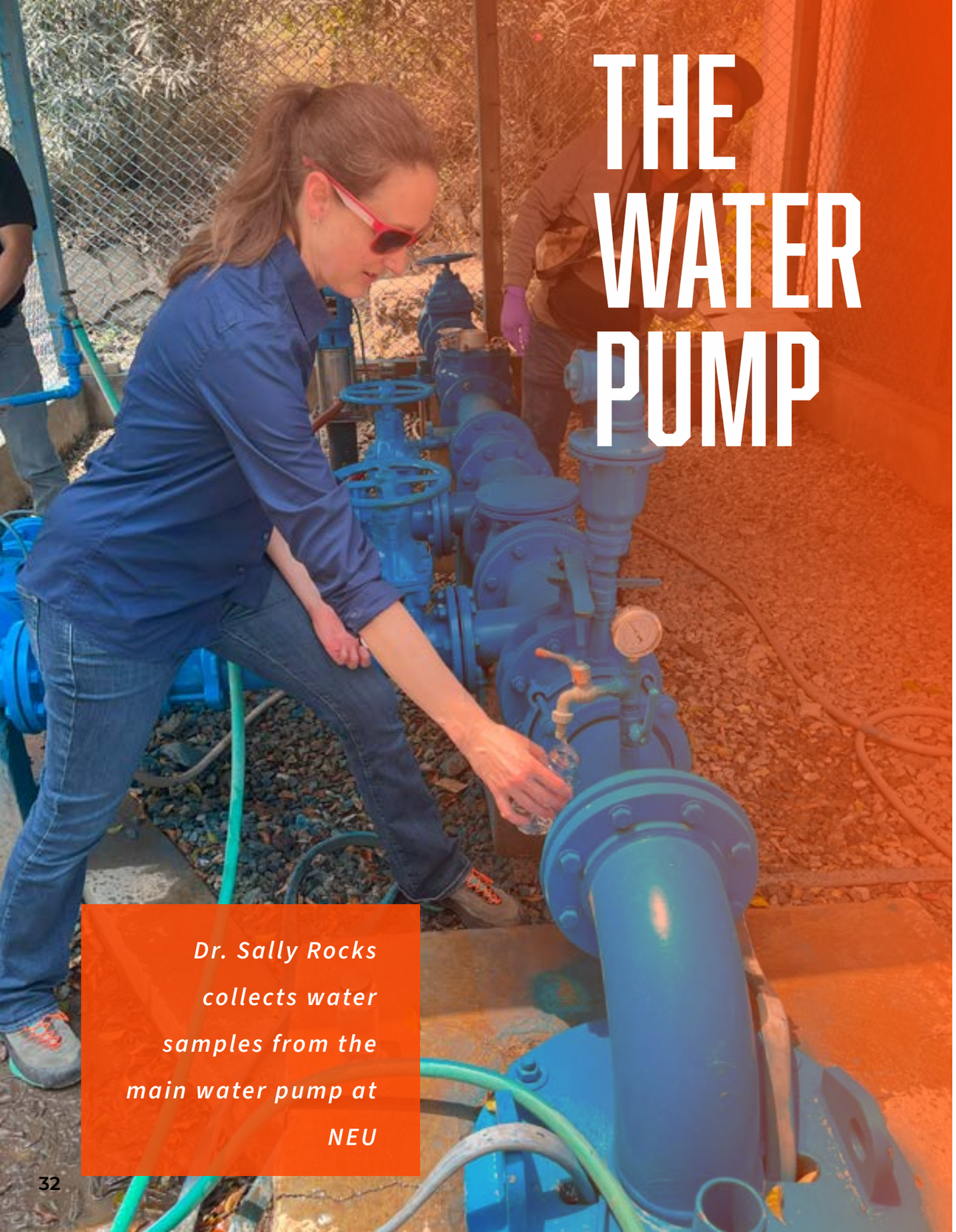
COLLECTING WATER IN PERU

EARTH SCIENCES, BIOLOGY, CHEMISTRY : COLLEGE OF SCIENCE

March 26-30, 2025

Recently, UVU faculty and researchers traveled to Peru to conduct water sampling for two projects being done on water quality. On the western side of Lima, the municipalities of Santa Eulalia, Chosica, and Trujillo are facing significant challenges due to excessive water, resulting in flooding. Researchers, collaborating through UVU, are actively working to address these issues. Flooding can have widespread impacts on various aspects of the community, such as horticulture, local water sources, and infrastructure. These researchers are studying the effects and developing solutions to help mitigate the consequences of such water-related problems.

In another project on the eastern side of Peru, Lake Titicaca is facing similar water quality issues as those of Lake Utah. To address these challenges, collaborators are working together to develop solutions. The focus of the project includes analyzing the contents of the water, such as the presence of heavy metals, microplastics, pollution, and algae blooms. Researchers are exploring methods for harvesting the algae to reduce its impact on the ecosystem. Thei r findings and experience collaborating with fellow universities was deeply influential for future studies on these water sources.



THE WATER PUMP

Dr. Sally Rocks collects water samples from the main water pump at NEU

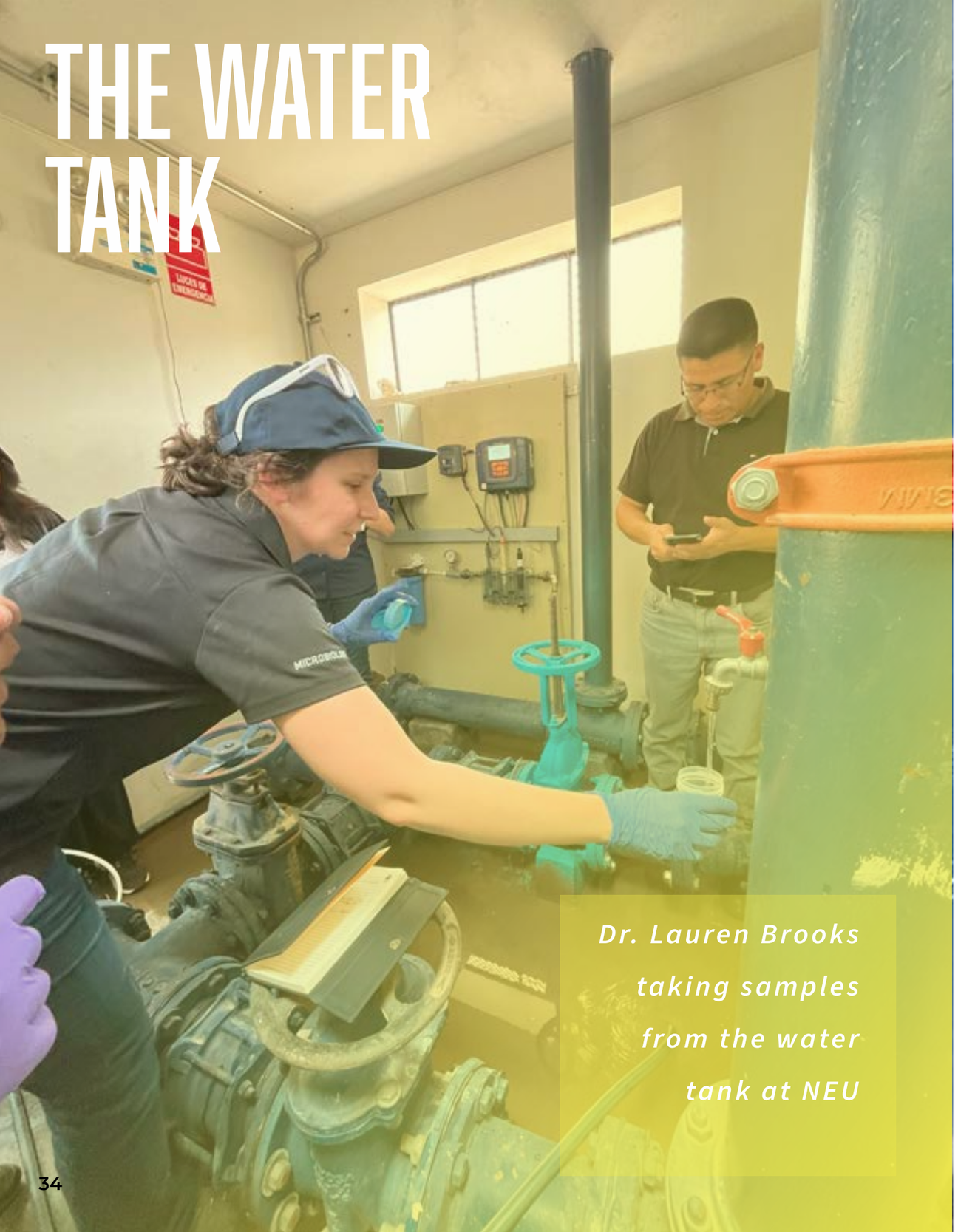
MICROPLASTICS

Research Group II, led by Dr. Sally Rocks of UVU and Peruvian scholars Mg. Augusto Manrique Ruiz (UNH) and Dr. Jorge Vera Alvarado (UNT), is tackling microplastic pollution in freshwater systems. The project aims to measure and identify tiny plastic particles—called microplastics—in rivers, reservoirs, drinking water, and freshwater fish across several regions of Peru.

Microplastics are minuscule fragments that come from the breakdown of larger plastic waste or are used in products like cosmetics and cleaning agents. Though invisible to the naked eye, they are increasingly being found in our food, water, and even air. This project seeks to understand how widespread the problem is by testing both natural water sources and household tap water, comparing results to see how much plastic may be entering the water during treatment and transport. Researchers will also examine freshwater fish to determine how microplastics make their way into the human food chain.

This work is especially important because the health impacts of microplastics are still largely unknown, though early research suggests potential risks to digestive, hormonal, and immune systems. By identifying how and where microplastics are entering Peruvian water supplies, the research team is laying the groundwork for future solutions. This study marks an essential first step in safeguarding water quality and public health—not just for Peru, but for similar regions facing the hidden threat of plastic pollution.

THE WATER TANK



Dr. Lauren Brooks taking samples from the water tank at NEU

MICROBIOLOGY

Research group III, led by Dr. Lauren Brooks, Dr. Weihong Wang, Dr. Alessandro Zanazzi, at UVU, alongside Dra. Lurdes Tuesta Collantes (UNT) and Dr. Guillermo Atencía Guerra (UNE), investigates how pollutants—including excess nutrients and human or animal waste—are affecting microbial communities and ecosystem health in Peruvian lakes.

This research tackles pressing questions: How contaminated are these waters? Where is the fecal pollution coming from? Are dangerous pathogens or antibiotic-resistant bacteria present? The team is also studying harmful algal blooms—rapid overgrowths of algae that can produce toxins dangerous to humans, wildlife, and water supplies. Understanding what organisms are behind these blooms, what toxins they produce, and what eventually causes them to die off could lead to better prevention and treatment strategies.

Microbiology plays a key role in both environmental and public health. By identifying how pollution, heavy metals, and even microplastics influence microbial life in water systems, the team is uncovering how small-scale changes can have large-scale impacts. This collaborative project also provides valuable opportunities for student research and opens doors to comparing microbial dynamics in Peru to similar ecosystems like Utah Lake.

THE CAFETERIA SINK

Dr. Eddy Cadet taking samples from the cafeteria sink at NEU

HEAVY METALS

Led by Dr. Eddy Cadet at UVU and Peruvian colleagues Dr. Dante Salas and Dr. Rómulo Loayza, the team is focusing on metals such as mercury (Hg), lead (Pb), arsenic (As), and cadmium (Cd), among others. Their research examines how these metals accumulate in the environment—especially in water, sediment, and fish species like rainbow trout and ispi.

The project is particularly concerned with bioaccumulation and biomagnification, which refer to how toxic substances build up in organisms over time and increase in concentration higher up the food chain. This means that even small traces of metals in water can become more concentrated in fish—and ultimately affect human populations that rely on these fish as a food source. The team is also working to identify the sources of pollution, with particular attention to mining activity in the region.

This work is crucial because heavy metals pose serious health risks to both humans and wildlife. Contaminants like lead and mercury can cause neurological damage, especially in children, while arsenic and cadmium have been linked to cancer and other chronic diseases. By studying the spread and concentration of these pollutants, the research group aims to inform both public health policy and environmental protections in Peru—and contribute to global understanding of water contamination challenges.

VISITING CHOSICA

Part of the project included testing the waters at the Rimac River in the nearby munincipality of Chosica. Here we see Dr. Sally Rocks testing for microplastics in the river.

VISITING SANTA EULALIA

Lauren Brooks collects samples of a well source in Santa Eulalia

Samples were also taken from a residential area from a community member's sink.

UVU UNESCO Chair Director, Baldomero Lago, who helped orchestrate the project, assisted in water sampling at an Elementary School in Santa Eulalia.

PUNO, LAKE TITICACA

While in Puno, Eddy Cadet took samples on Lake Titicaca to test for trace metals, and other material. The similarities between Lake Titicaca and Utah Lake make this project relevant to both the Peruvian universities and municipalities, and UVU, Utah County, and our community members.

Joining with our research partners in Peru, we hope to address similar issues of water quality and share these with both of our communities. As we work together globally, even local issues can become solutions and opportunities for collaboration and connection.

VISITING TRUJILLO

Technology used to test the water

Samples from stream in Trujillo taken by Dr. Baldomero Lago. Samples being tested for plastics require specific, glass containers to avoid contamination.

In the municipality of Trujillo, the group tested a stream that the community uses for irrigating crops and home gardens. This stream was clearly contaminated, concluding from the noteable stench and the obvious pollution. Getting this water clean for the community will be a huge success to this project as further research is done on the collected samples.

INITIAL RESEARCH FINDINGS

BRIDGING WATERS PROJECT REPORT

CLEAN WATER RESEARCH IN PERU (2025)

A Collaborative Initiative between the UNESCO Chair on AI and Environmental Stewardship for Sustainable Futures at *Utah Valley University and Partner Institutions in Peru*

BRIDGING WATERS
PERU UTAH
COLLABORATIVE SOLUTIONS FOR WATER SUSTAINABILITY BETWEEN PERU AND UTAH

INTRODUCTION

In March 2025, a collaborative research team from Utah Valley University, working alongside Peruvian university partners and local communities, conducted fieldwork to evaluate water quality in key regions of Peru. Over 120 samples were taken from cities including Lima, Trujillo, Santa Eulalia, and Chosica to analyze three major concerns: Trace Metals, Fecal Contamination, and Microplastics. This report presents preliminary findings across these areas, identifies potential health risks, and recommends actionable next steps to improve water safety and resilience.

SAMPLE LOCATIONS

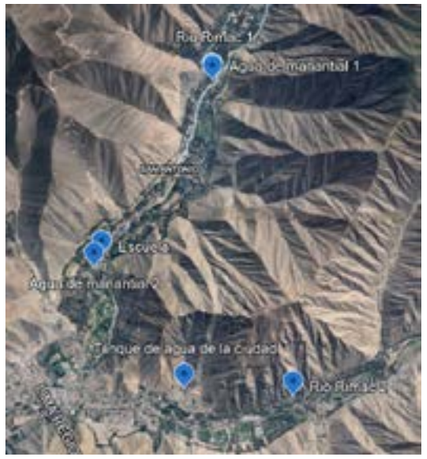
Samples were collected from rivers, canals, reservoirs, wells, and taps across:

Trujillo

Santa Eulalia

Chosica

Lima (UNE campus)



SECTION I: TRACE METALS

Lead Researcher: Dr. Eddy Cadet

SAMPLING LOCATIONS

Trujillo

Santa Eulalia

Chosica

Lima (UNE campus)

METALS ANALYZED

Arsenic (As), Cadmium (Cd), Lead (Pb), Copper (Cu), Iron (Fe), Zinc (Zn)

NOTABLE RESULTS

- Arsenic levels exceeded WHO and Peruvian safety limits in all cities, most notably in Trujillo
- Trujillo: Highest concentration of Arsenic in irrigation ditches (0.220 mg/L; limit: 0.01)
- Santa Eulalia: Arsenic present in the Rimac river (0.02 mg/L) and reservoir water (0.021 mg/L)
- Chosica and UNE Campus: Detected Arsenic in campus tap water and Rimac River
- Cadmium exceeded the WHO limit (0.003 mg/L) only in Trujillo (0.01–0.02 mg/L)
- Lead was found only in Trujillo (0.07 mg/L in irrigation ditch; limit: 0.01)
- Copper and Iron exceeded guidelines in localized cases (e.g., 31.4 mg/L Fe in Trujillo ditch)

POTENTIAL SOURCES

Mining and industrial runoff (especially relevant with Peru's copper expansion)

Agricultural discharge

Aging plumbing systems (especially in UNE kitchen tap)

HEALTH RISKS

Arsenic: Cancer, liver and nervous system damage

Cadmium: Developmental and neurological toxicity

Lead: Cognitive damage in children; cardiovascular risks

Top Left- Collecting samples from the Cafeteria at UNE, Top Right- Working in the lab
Bottom- Samples from Lake Titicaca in Puno

SECTION II: MICROBIOLOGY (FECAL CONTAMINATION)

Lead Researcher: Dr. Lauren Brooks

METHODOLOGY

Water samples were tested for human-specific fecal contamination using genetic markers and conventional PCR, which allow for source tracking. Traditional E. coli culturing, the standard method for detecting fecal contamination, was not possible due to field conditions requiring same-day processing and lab access. Samples were instead filtered onsite, preserved, and analyzed later in Utah.

SAMPLING AREAS

UNE Campus (Lima)

Trujillo

Santa Eulalia

Chosica

Each site had 2 samples + control blanks; analysis was later conducted in Utah.

KEY FINDINGS

UNE (Lima)	Well water tested negative. Kitchen tap sample failed quality control.
Trujillo	One of three samples tested positive; the other two showed no contamination.
Santa Eulalia	Three of five valid samples showed contamination, including one household tap.
Chosica	Three of six valid samples showed contamination. School and city tap water were clean.

HEALTH IMPLICATIONS

Presence of human fecal matter raises risks for:

Diarrheal diseases

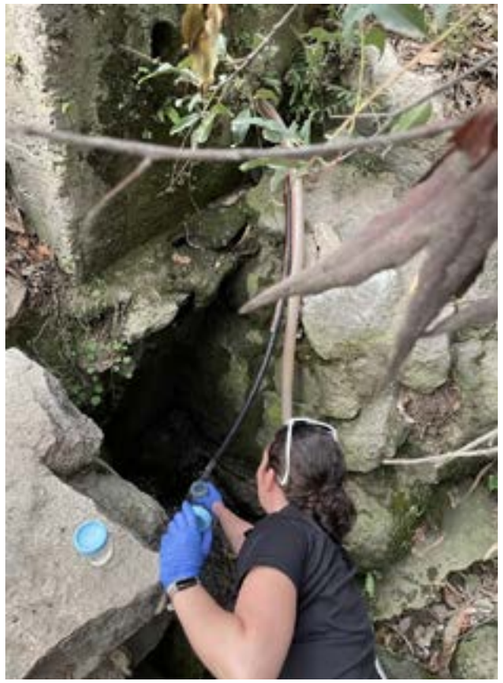
Hepatitis A

Parasites

Antibiotic-resistant bacteria

NEXT STEPS

- Incorporate traditional E. coli culturing in future testing to confirm live contamination.
- Use quantitative PCR (qPCR) to measure contamination levels.
- Validate marker performance in the Peruvian context.
- Broaden testing to include non-human sources (e.g., livestock).
- Sequence recovered DNA to assess pathogens and antibiotic resistance.



Top Left- Collecting samples from water pump at UNE
Top Right- Samples from a spring in St. Eulalia
Bottom Left- Testing at the hotel
Bottom Right- Collecting samples from a water tank at UNE

SECTION III: MICROPLASTICS

Lead Researcher: Dr. Sally Rocks

LOCATIONS

UNE Campus (3 sites)
Santa Eulalia (6 sites)
Chosica (6 sites)
Trujillo (3 sites)
Samples included rivers, wells, tanks, and household taps.

METHODOLOGY

Filtration, digestion, and fluorescence microscopy to isolate particles

Up to 118 images per filter analyzed using custom software

Units measured in particles per 10 g of water

PRELIMINARY RESULTS

UNE Campus: Highest microplastic levels (53 particles/10g)

Trujillo: Second-highest (30 particles/10g)

Santa Eulalia & Chosica: Mid-range (8–25 particles/10g) depending on source

HEALTH & ENVIRONMENTAL IMPACT

Found in blood, brain, placenta, and breast milk (cited literature)
Associated with:
Neurotoxicity
Reproductive harm
Oxidative stress

Can also carry heavy metals (arsenic, cadmium, lead) and organic pollutants

OBSERVATIONS

Plastic infrastructure (e.g., tanks and pipes) is likely contributing

Potential leaching from connected rivers such as the Rimac

Top Left- Collecting samples from water pump at UNE
Top Right- Testing water in Puno
Bottom Left- Collecting samples at Rimac River
Bottom Right- Collecting samples from a home in St. Eulalia

PROPOSED SOLUTIONS & NEXT STEPS

1. BROADER AND CONTINUOUS SAMPLING

Include Puno, Huancavelica, and Chimbote in future campaigns
Sample during both wet and dry seasons for comparative data

2. CAPACITY BUILDING IN PERU

Train local universities in traditional E. coli and metal testing
Share qPCR protocols and low-cost microplastic detection techniques

3. IMPROVE INFRASTRUCTURE

Identify and replace old metal or plastic piping
Introduce low-cost arsenic filtration systems and public education

4. ADVANCED RESEARCH

Perform hair/nail testing for long-term arsenic exposure
Correlate microplastic and metal concentrations to study co-contaminant risks
Conduct freshwater fish studies in Trujillo, Puno, and Huancavelica

5. ADVOCATE FOR POLICY SUPPORT

Use data to encourage municipal investment in water treatment
Propose public-private partnerships to scale solutions

CONCLUSION

The 2025 Bridging Waters field campaign offers clear evidence of emerging threats to Peru's water safety. Consistent arsenic contamination, localized fecal risk, and the emergence of microplastic pollution each represent a call to action.

By combining science, community engagement, and international collaboration, this project illuminates a path toward securing clean water and a sustainable future for all Peruvians.

KEVIN MCCARTHY

ALEXIS GEIST

BRIAN BARTHEL

SANITATION PROJECT

CAMBODIA

college of health and public services COLLABORATES ON SANITATION PROJECT with Cambodia

Date, 9th, 2025

In May 2025, faculty and students from Utah Valley University (UVU) traveled to Cambodia to continue a powerful tradition of service-based learning that is transforming rural communities—and the students themselves. Through the Cambodia Sanitation Project, a collaboration between UVU's Department of Public Health and the doTERRA Healing Hands Foundation, participants engaged in building latrines, sharing hygiene education, and forging connections that span cultures and continents. But the impact of the project extended far beyond infrastructure. For many involved, the trip became a deeply personal journey into global health, sustainable change, and human dignity.

A LASTING IMPACT

Faculty member Alexis Geist, explained, "One aspect of this project besides building the latrines, is we want to provide funding for school uniforms, because kids need uniforms to go to school." The inspiration for this element of the program came from a moment on an earlier trip when Geist encountered a young girl unable to attend school simply because she lacked a uniform. "I asked our liaison, Should I give this to her? And he said, If you want to change her life, buy her a school uniform. And so we did it- we changed her life with just $6... I think it should always be a piece of this project, because... that is life changing for a little child, you know? And life changing for the students."

> *"Public health isn't just working in the health department... it's being able to make a global impact."*
>
> *- Alexis Geist, Public Health faculty*

HANDS ON LEARNING

The team's work centered on the Prasat Commune in the Saang District—an area where access to sanitation and clean water is limited. In addition to constructing latrines and distributing ceramic water filters, students and faculty worked in partnership with a local hospital, a well-established NGO that welcomed them into its pediatric trauma unit and administrative offices.

"This hospital has their stuff together. They are doing really great work, they just need help," said Geist, who has a longstanding relationship with the hospital's CEO. "Their grant department is amazing...It would be a great opportunity for students to learn in that office as well."

EMS faculty member Kevin McCarthy noted the broad relevance of the experience across health disciplines. "I think almost any of the UVU health programs, especially as a service learning nurse- or I think even the firefighters from EMS, would benefit from this kind of opportunity."

At its core, the project offers students a living education in the social determinants of health. As Geist put it:

"The more public health students can understand that the health of communities... those social determinants of health are what affect those developing countries and those communities. It's their education, it's their housing, it's the agriculture and understanding... the more public health students can gain that understanding, that's everything... Public health isn't just working in the health department... it's being able to make a global impact. That's what I want to open up for them."

STUDENTS RETURN TRANSFORMED

“ I just felt so lucky to be a part of UVU... I think the best way to find that passion within any field is to see it firsthand. ”

- Ella Desmarais, UVU student and 2025 Grad

For students, the Cambodia experience was more than just educational—it was transformational.

Ella Desmarais, a UVU Public Health graduate, arrived unsure of her future path but left with clarity and purpose. “I was very lost going into this trip on what I wanted to pursue in my future, and seeing these hospitals and ambulances and just being able to teach health... I am now going down that path, and I plan on applying to PA school next fall.”

She reflected on the privilege and responsibility of engaging with communities abroad.

“I just felt so lucky to be a part of UVU! Although I was so grateful to help others, this trip, honestly, probably served myself in more ways than one. We’re all very lucky that we got to do something like this. I think the best way to sort of find that passion within any field is to see it firsthand.”

Public health graduate Chloe Kuck saw the trip as an opportunity to explore policy and global systems. “Just talking with Liang, [our local partner] about the differences and how, like, the government and policies are run there—it was very enlightening for me to see what’s going on in a completely other country.”

Kuck emphasized the importance of breaking down reductive narratives. “I got the Global Intercultural Distinction here at UVU, and a really big topic that we talk about all the time is the “One Story” and how we will tell ourselves one story about a place. Everyone was telling me that Cambodia was super impoverished and a developing country and all this stuff, which is true, but that’s not the whole picture, and so I think it’s important to put yourself into those situations where you can expand your worldview.”

For Shelbee Pyne, the lasting value of the trip came from its sustainable approach.

“They donate supplies, which is great, right? People need supplies, but… the most helpful things… has been sharing information… so you’re not just handing out supplies and leaving them, but actually helping them understand how to sustain life with that. And so I think that was something that we got to do with like latrine work, that’s very sustainable for them. They now have a bathroom. And then all of what we were teaching is going to be able to be sustainable for them. ”

She felt inspired by the experience of working directly with communities and observing healthcare systems abroad. “To be able to see the hospitals, their ambulance systems, their emergency system… knowing that there is potential in the future to travel to different places, to help with whatever my health future looks like… that’s very exciting to me.”

“What we were teaching is going to be sustainable for them.”

- Shelbee Pyne, UVU student

SMALL MOMENTS, BIG MEANING

Among the most powerful memories were the quiet, human moments that defied language and borders. Geist recalled one in particular:

"An experience that I personally had was with a patient at the children's hospital. His father was taking him on a little walk in a wheelchair. The boy was having a hard time focusing on any interaction with others. I bent down so I was eye to eye and he looked at me. I started to talk to him, and he got the biggest smile on his face. It is interesting that it is the little moments like this in life that stay with you."

WHERE LEARNING MEETS PURPOSE

Reflecting on the trip as a whole, Geist concluded:

"One thing that I have been thinking about is how impactful this trip was for our students, and how this experience will be with them for the rest of their lives. UVU does an incredible job of not only teaching and educating, but of expanding the world view of students. I am grateful to have been a part of this trip, and look forward to more to come."

This experience not only brought vital sanitation infrastructure, health education, and dignity to communities in rural Cambodia—it also profoundly shaped the students and faculty who participated. By working alongside local partners, navigating cultural differences, and witnessing the real-world impact of public health practices, UVU students gained hands-on skills, broader global perspectives, and renewed clarity about their future careers. For faculty, the trip reinforced the power of experiential learning to inspire purpose and empathy in the next generation of health professionals. The Cambodia Sanitation Project is a testament to the transformative potential of service learning: a mutual exchange where both communities and classrooms grow stronger together.

CARL CANLAS

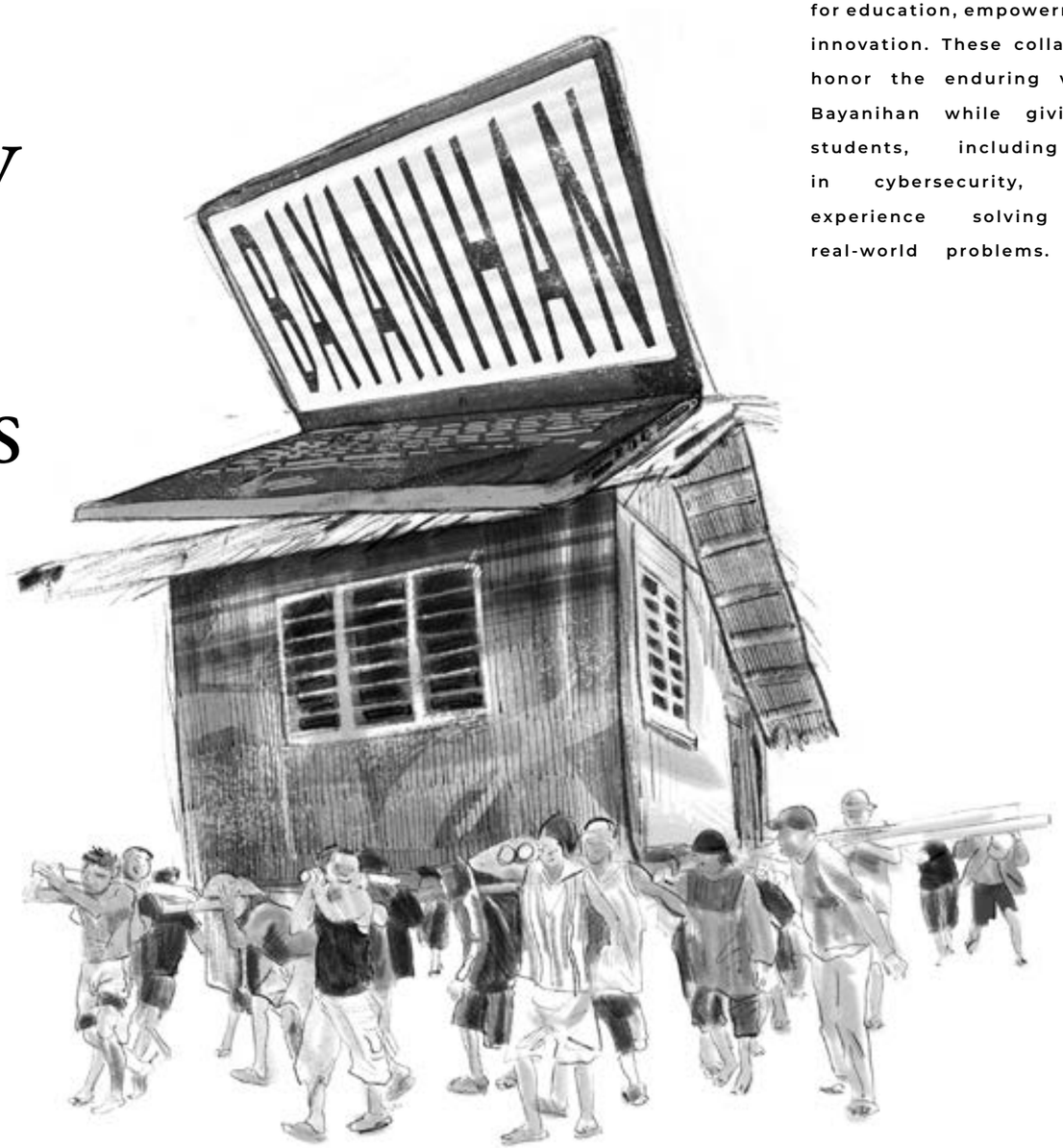
YI YIN

KELSEY HIXSON - BOWLES

AI COMPARITIVE STUDY

PHILIPPINES

Lifting Communities with Technology in the Philippines



AI BAYANIHAN: BUILDING SUSTAINABLE FUTURES THROUGH INCLUSIVE INNOVATION

"An ancient tradition is lifting a new kind of home—built not of wood and nails, but of ideas and technology." For generations, the Filipino ideal of Bayanihan—neighbors coming together to lift not only houses, but one another—has embodied the power of unity in service of a shared goal, done not for recognition or reward, but simply because it is the right thing to do for the good of humanity. Today, that timeless spirit is taking shape in new ways, as Utah Valley University (UVU) partners with leading institutions across the Philippines to harness artificial intelligence (AI), cybersecurity, and other emerging technologies for education, empowerment, and innovation. These collaborations honor the enduring values of Bayanihan while giving Utah students, including those in cybersecurity, hands-on experience solving urgent real-world problems. Working alongside global partners, they gain cutting-edge skills, fresh perspectives, and the chance to create lasting impact—both abroad and back home in Utah. UVU is in the process of formalizing Memoranda of Understanding (MOUs) with three prestigious institutions in the Philippines: the Polytechnic University of the Philippines (PUP), De La Salle–College of Saint Benilde (DLS-CSB), and Far Eastern University (FEU). These partnerships aim to promote joint research, academic exchange, and innovation in artificial intelligence (AI), with a shared vision of using technology to address pressing global challenges.

This initiative not only strengthens UVU's international academic network but also reflects a mutual commitment to inclusive, ethical, and sustainable AI development. By bridging continents and cultures, these MOUs lay the groundwork for a future where knowledge and innovation transcend borders.

EMPOWERING REGIONS: PARTNERSHIP WITH BARMM

The Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) is a self-governing region in the southern Philippines, established in 2019 as part of a historic peace process. It represents a significant milestone in granting political and administrative autonomy to the Bangsamoro people—predominantly Muslim communities with a distinct cultural and historical identity. Governed by the Bangsamoro Parliament, BARMM is tasked with addressing long-standing issues of marginalization, underdevelopment, and social inequity.

UVU's collaboration with BARMM is particularly meaningful because it brings cutting-edge technology and educational resources to a region that has long been underserved. This partnership is designed to integrate AI into education, governance, and sustainable development. Key focus areas include:

- -AI education and workforce development through joint training programs and digital literacy campaigns.
- Community-based AI projects aligned with BARMM's development goals

This initiative is not just about technology—it's about empowerment, equity, and resilience. It reflects a commitment to ensuring that the benefits of AI are accessible to all, especially those in regions where innovation can be a catalyst for peace and progress.

INVESTING IN THE FUTURE: AI LITERACY FOR HIGH SCHOOL STUDENTS

Recognizing that the future of AI lies in the hands of today's youth, UVU has launched an AI Literacy Program in partnership with Paringao National High School in Bauang, La Union. This grassroots initiative introduces students and teachers to the fundamentals of AI, machine learning, and ethical technology use through interactive workshops and hands-on activities.

By equipping young minds with the tools to understand and shape emerging technologies, this program plants the seeds of innovation in communities that will define the future. It also supports educators in integrating AI concepts into their curricula, ensuring that the impact of this initiative is both immediate and enduring.

INCLUSIVE INNOVATION: EMPOWERING PERSONS WITH DISABILITIES

In collaboration with Tahanan Walang Hagdanan, Inc. (TWHI)—a pioneering organization supporting persons with disabilities (PWDs) in the Philippines—UVU is exploring AI-enabled solutions to enhance accessibility, mobility, and independence for PWDs. But this partnership goes beyond empowerment through technology; it also addresses a pressing and deeply personal challenge.

TWHI has been the target of online scams, where people have created fake accounts or misused the organization's name on platforms like GoFundMe and social media to solicit fraudulent donations. These scams not only divert critical funds away from the people who need them most.To combat this, the project aims to develop AI-driven security measures that can help detect and prevent fraudulent activity, protect donor integrity, and safeguard the organization's digital presence. This includes exploring tools for identity verification, anomaly detection, and secure communication channels. This initiative is especially meaningful to Dr. Carl Canlas, a member of UVU's College of Engineering & Technology and the UNESCO AI Committee. With a background in cybersecurity and information systems, Dr. Canlas brings technical expertise to the project—but also a personal passion. Having a loved one with Spina Bifida, he is deeply committed to advancing technologies that protect and uplift the disability community. By centering both technological innovation and human dignity, this partnership exemplifies the ethical imperative of inclusive AI—ensuring that no one is left behind in the digital age.

STRENGTHENING UTAH THROUGH GLOBAL COLLABORATION

While these initiatives focus on uplifting communities in the Philippines, they also directly enrichUtah. UVU students—especially those studying cybersecurity and technology—gain invaluable, hands-on experience addressing real-world challenges such as combating online fraud. Collaborating with international experts and institutions exposes them to cutting-edge

innovations and diverse perspectives, enhancing their skills and broadening their outlook. This global partnership model ensures that the knowledge and benefits generated flow back to Utah, strengthening its workforce, academic programs, and capacity for inclusive innovation.

CONCLUSION: A MODERN EXPRESSION OF BAYANIHAN

Each of these initiatives—academic partnerships, regional empowerment, youth education, and inclusive innovation—embodies the Filipino spirit of Bayanihan: a collective effort to uplift one another without expectation of reward. Through these projects, UVU and its partners in the Philippines are advancing the frontiers of AI while honoring a cultural legacy of mutual support and shared progress. And as Utah students and faculty gain hands-on experience with globally significant challenges, the impact of this work echoes at home—building not just international bridges, but stronger, more connected communities in Utah as well

LYNN FARLEY

“BUILDING THE CAPACITY AND CONFIDENCE OF FAMILIES LIVING WITH CHILDREN WITH DISABILITY”

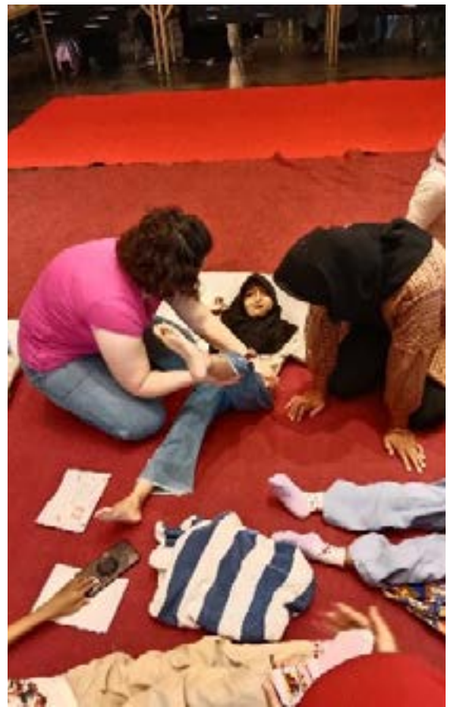
INDONESIA

HOPE AT HOME:

EMPOWERING FAMILIES & CHILDREN WITH DISABILITIES IN INDONESIA

In April 2025, UVU faculty occupational and recreational therapists partnered with UCP Roda Untuk Kemanusiaan (UCPRUK) to lead a groundbreaking home-based therapy training in Wonosobo, Central Java, Indonesia. Over two days, more than 120 parents and caregivers of children with disabilities gathered to learn how simple, play-based activities—like practicing motor skills, safe feeding, or even brushing teeth—can improve daily life for their children.

For many parents, this was the first time they had received professional training. One mother shared that she had always improvised ways to help her child, but often wondered if she was doing enough. After hands-on practice with UVU's therapy team, she left feeling confident, supported, and hopeful—realizing that she already had the skills and creativity to help her child thrive. Families also received therapy toolkits designed from everyday, affordable materials, making it easier to continue progress at home.



The impact is spreading beyond individual families. Inspired by the training, local leaders have expanded services at the "Lentera" therapy center, which now serves 40 children each month. This shows how grassroots efforts can spark lasting change in communities where access to therapy is otherwise limited.

Looking ahead, UVU plans to open opportunities for Occupational Therapy and Physical Therapy students to join future trainings through Global Fieldwork. With more funding and support, students will gain invaluable, hands-on teaching experience alongside Indonesian families—and return to Utah equipped with new skills, cultural insights, and compassionate approaches that will benefit our own communities.

This project demonstrates the power of global collaboration: improving lives abroad today, while preparing tomorrow's professionals to make a difference at home.

PROJECTS IN THE PIPELINE

COLLEGE OF SCIENCE

EARTH SCIENCE

"GEOSPATIAL ANALYSIS AND REMOTE SENSING TECHNIQUES"

Faculty lead: Weihong Wang, Matt Olson

CAMEROON

COLLEGE OF ENGINEERING AND TECHNOLOGY

INFORMATION SYSTEMS

"AI: ARCHITECTURE OF COGNITIVE SERVICES FOR ANALYZING LARGE AMOUNTS OF INFORMATION, ENSURING CONSOLIDATED INTERACTION AND DECISION-MAKING"

Faculty lead: Carl Canlas, Matt North

UKRAINE

COLLEGE OF HUMANITIES & SOCIAL SCIENCES

SOCIAL BEHAVIORAL SCIENCES

"HARNESSING PREDICTIVE AI FOR EARLY DETECTION AND PREVENTION OF SUICIDAL TENDENCIES AMONG UNIVERSITY STUDENTS"

Faculty lead: Kent Hinkson, Shantelle Tjaden, Malisa Brooks

KENYA

COLLEGE OF HUMANITIES & SOCIAL SCIENCES / SCHOOL OF EDUCATION

ELEMENTARTY EDUCATION

"AI FACULTY AND STUDENT PERCEPTIONS: A COMPARATIVE STUDY"

Faculty lead: Adam Ogurl, Yi Yin, Kelsey Hixon-Bowles

CHINA

SCHOOL OF EDUCATION

SPECIAL EDUCATION

"DEVELOPING PEDAGOGIES IN SPECIAL EDUCATION"

Faculty lead: George Odongo

CAMEROON

ELEMENTARY EDUCATION

"K-12 EDUCATIONAL ATLANTIC COLLABORATION"

Faculty lead: Adam Ogurlu

THAILAND

SCHOOL OF THE ARTS

MUSIC

MUSIC DEVELOPMENT VIOLIN"

Faculty lead: Cheung Chau

BULGARIA

MUSIC

"MUSIC CULTURE AND COLLABORATION"

Faculty lead: Cheung Chau

UKRAINE

ADAM OGURLU

“K-12 ATLANTIC COLLABORATION”

THAILAND

UVU AND THAILAND EXPLORE AI IN LEARNING

PURPOSE AND VISION

Utah Valley University (UVU), through its UNESCO Chair on AI and Education, is advancing ethical, inclusive, and globally connected learning. Recent exchanges with Thai educational leaders have strengthened this mission, emphasizing cross-cultural collaboration, responsible AI use, and educational equity.

THAI DELEGATION AT UVU

From April 5–12, 2025, UVU hosted Nakharin Sormad, Global Ambassador and Education Counselor, and Makhsat Saniyaz, Head of Educational Technologies, from Thailand's Atlantic Education Group. Representing three international schools in Bangkok, they toured UVU's campus, met with faculty, and presented on the Thai education system. Discussions focused on curriculum, technology, and the foundations for student exchanges, joint research, and shared teaching practices.

UVU IN THAILAND

In return, Dr. Adam Ogurlu of UVU's School of Education attended the Global Forum on the Ethics of Artificial Intelligence in Bangkok. His visit included meetings on curriculum and AI literacy at Chindamanee School, exploration of exchange opportunities, and dialogue with policymakers on aligning technology with cultural values.

SHARED EDUCATIONAL VALUES

Both visits highlighted a strong alignment in philosophy. Thai schools demonstrated a holistic balance of academics, character education, and cultural heritage, while Thai educators praised UVU's innovation and global outlook. Observations reinforced that global partnerships thrive when rooted in mutual respect and local traditions.

GLOBAL IMPACT

This collaboration supports UN Sustainable Development Goal 4: Quality Education. By sharing best practices, UVU and Thai institutions are preparing students for a globalized future. With ethical AI and innovative teaching, both sides see technology as a tool to personalize learning and expand opportunity—while keeping teachers and cultural values at the center.

LOOKING AHEAD

The growing partnership between UVU and Thai educators shows how local experiences can shape global solutions. By sharing approaches to curriculum, technology, and teacher training, both Utah and Thailand are building stronger classrooms at home while contributing to broader conversations in education.

United Nations offices in Bilbao, Spain

UNESCO CAMPUS NETWORK

This summer, a delegation of Utah Valley University faculty representing the School of Education, College of Science, Humanities, Business, and Deputy Provost, Kathren Brown, participated in the UNESCO Summer Institute across Spain and the Basque Country.

The institute brought together representatives from UNESCO-affiliated institutions to foster collaboration, exchange best practices in teaching and research, and strengthen global academic partnerships. UVU faculty visited four institutions—University of Deusto in Bilbao, Saint Louis University in Madrid, University of Salamanca, and the United Nations 2030 Local Coalition (Basque Country).

Above: Salamanca University Library

Throughout the visit, UVU participants engaged in academic meetings with university leadership, presented lectures in their respective fields, and joined panel discussions with faculty and students. Faculty were also paired with counterparts in the same disciplines to share teaching methods, research interests, and opportunities for future collaboration.

This initiative supports the UVU UNESCO Chair's mission of building international partnerships and advancing the United Nations' 2030 Sustainable Development Goals through education, research, and community engagement.

From top to bottom:
Kathren Brown lecturing in Madrid
University of Salamanca Faculty
Meeting with UN offices in Bilbao

UNESCO CHAIR RETREAT

"You have already developed networks of international partnerships that are very much on the cutting edge of UNESCO Chair organization and activities... The efforts you have made are admirable."

- Dr. David Pietz, UNESCO Chair at the University of Arizona

On Monday, August 4, the Utah Valley University (UVU) UNESCO Chair on Artificial Intelligence and Environmental Stewardship for Sustainable Futures held its first annual retreat at the Fulton Library. Members of the Executive Board, along with representatives from the AI, Environmental Stewardship, and Sustainable Futures Committees, gathered for an open discussion on the Chair's mission, objectives, and priorities for the upcoming academic year.

The event's special guest was Dr. David Pietz, UNESCO Chair on Environmental History at the University of Arizona, who brought valuable perspective

UTAH VALLEY UNIVERSITY

unesco Chair

from his own decade of experience leading a UNESCO Chair. Dr. Pietz praised UVU's early progress and organizational model. He noted that UVU's approach to building global collaborations positioned it strongly for future growth.

Drawing from the University of Arizona's example, Dr. Pietz shared lessons on developing graduate research opportunities, creating sustainable funding models, and strengthening connections to UNESCO's global network. He emphasized the value of UVU's distributed leadership approach, which brings multiple faculty and community members into project leadership:

"Because you have incorporated any number of individuals into your Chair's activities, it doesn't all have to fall on one person—it's a real strength." -Dr. David Pietz

He also encouraged UVU to continue engaging with other UNESCO Chairs in the U.S. and abroad, suggesting that thematic or regional collaborations could amplify impact.

During the retreat, participants reviewed protocols for new projects, outlined plans for UVU's Global Fieldwork opportunities, and discussed the Chair's local impact—particularly how UVU's UNESCO designation benefits Utah communities through student skill development, cross-cultural exchange, and applied problem-solving.

As UVU's UNESCO Chair continues to grow, the retreat marked an important step in shaping its vision and ensuring that initiatives not only advance global sustainability goals but also bring lasting benefits to the state of Utah.

UVU REPRESENTS ACADEMIA ON GLOBAL STAGE AT UNITED NATIONS HIGH-LEVEL POLITICAL FORUM

HIGHLIGHTS ACADEMIA'S ROLE IN ADVANCING SDGS

JULY, 2025

New York, NY — Utah Valley University (UVU) was represented at the 2025 United Nations High-Level Political Forum (HLPF) by Dr. Baldomero Lago, Chief International Officer and head of UVU's Office for Global Engagement. Speaking at the Local 2030 Coalition Special Event, Dr. Lago emphasized academia's vital role in advancing the UN Sustainable Development Goals (SDGs).

"A core component of the university is to teach, to research, and to serve our students and communities," he said. "Our academic institution is committed to developing and applying these core values through what we call the GLOCAL Plan—bringing sustainable development from the global to the local level."

Dr. Lago noted that UVU integrates the SDGs across academic disciplines, encouraging faculty to research and teach sustainability while empowering students to implement solutions. "Balancing the act of teaching and learning with the common goal of sustainable development must be a priority," he added. "The beauty of the SDGs is that they can be integrated into any lesson, any core curriculum, in any classroom."

He also shared UVU's UNESCO Chair project in Peru, where students and faculty research water contamination through testing for microplastics, bacteria, and heavy metals—an effort that mirrors local water research on Utah Lake and underscores the link between global goals and local realities.

The Local 2030 event, part of the UN's High Impact Initiative on Localization, highlighted how education and community-driven projects advance the 2030 Agenda. UVU's participation reflects its ongoing commitment to sustainability, intercultural dialogue, and preparing students to lead with purpose.

"OUR ACADEMIC INSTITUTION IS COMMITTED TO DEVELOPING AND APPLYING THESE CORE VALUES THROUGH WHAT WE CALL THE GLOCAL PLAN—BRINGING SUSTAINABLE DEVELOPMENT FROM THE GLOBAL TO THE LOCAL LEVEL."

- Dr. Baldomero Lago

FROM UTAH TO THE WORLD, AND BACK

WHAT IS GLOBAL FIELDWORK?

"Global Fieldwork" is a short-term, hands-on learning opportunity for students enrolled in UVU courses connected to an official UVU UNESCO Chair project. These experiences are tied to the course curriculum and offer students the chance to engage directly with Sustainable Development Goals (SDGs) and communities in the Global South. Destinations may include countries like Peru, the Philippines, Dominican Republic, Cambodia, and others. Unlike traditional study abroad programs, Global Fieldwork is not a standalone travel course. It is an extension of classroom learning grounded in the objectives of a specific UVU UNESCO project. There is no Global Fieldwork without a project, and students must be registered in a course where the instructor has integrated a UNESCO initiative into the syllabus. Fieldwork trips usually take place during or at the end of the semester, depending on the course design. Participation is completely optional and does not affect a student's grade or engagement with the course project. Students who choose to participate are responsible for covering travel costs, though faculty may share information about funding opportunities. Trips are kept short—typically 1 to 2 weeks—to ensure accessibility.

BENEFITS OF GLOBAL FIELDWORK:

Real-world application of course material
Active contribution to development efforts in the Global South
Multicultural immersion and collaborative experience
Certificate of participation to add to your résumé or portfolio

Students interested in participating should speak with their course instructor. Faculty interested in adding a Global Fieldwork component to their UNESCO project can indicate this in the faculty project application form. If you have questions, please send a message to lagoba@uvu.edu or maritza.sotomayor@uvu.edu

WANT TO HELP SUPPORT OUR STUDENTS?

MAKE A DONATION!

One of the best ways you can support the UNESCO Chair at UVU is by donating funds to our students for Global Fieldwork experiences. The students who have participated in Global Fieldwork thus far have expressed their gratitude for this life changing experience. If you would like to donate, you may do so through the Office for Global Engagement, email lagoba@uvu.edu, or scan the QR code below.

UNESCO CHAIR ON AI AND ENVIRONMENTAL STEWARDSHIP FOR SUSTAINABLE FUTURES

"Congratulations on the awarding of your UNESCO Chair at UVU!

The establishment of a UNESCO Chair is rare event and will have significant impacts your university, the United States, and our global partners. Chairs go through an incredibly rigorous review process, and your success is a testament to the excellence achieved through your work".

Mark Brennan
UNESCO Chair on Global Citizenship for Sustainable Peace through Youth and Community Engagement
The Pennsylvania State University

Patrick Ray

University of Cincinnati

Robert Chaskin
UNESCO Chair on Inclusive Urbanism

University of Chicago

Phyllis Magrab
UNESCO Chair on Sustainable Development, Early Childhood, Inclusive Education and Gender

Georgetown University

Shannon Biscoff

Perdue University

David Pietz
UNESCO Chair on Environmental History

University of Arizona

Steven Shankman
UNESCO Chair in Transcultural Studies, Interreligious Dialogue, and Peace

University of Oregon

We are so grateful for the many messages of congratulations from UNESCO Chair collegues around the country. Receiving the UNESCO Chair Award provides UVU with increased opportunities to connect with influential universities in the country and aroud the world.

SCAN THE QR CODE TO FIND OUR CONTACT INFO AND WEBSITE

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UNESCO Chair @ UVU

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UVU LA 210