



Please join us for Grand Challenges Week January 31st - February 4th.

Each day at 4:00 PM we will host a presentation and Q&A session via Zoom.

<https://uwyo.zoom.us/j/93611066672>

Monday, January 31st – The SHOW WYO Initiative

Researchers from the Haub School of Natural Resources and Environment and the School of Energy Resources team up to explore how live-streaming from Wyoming's national parks can overcome barriers to enjoying these remote wonders while creating new possibilities for conservatin fundraising.

Tuesday, February 1st - The Democracy Laboratory

The Democracy Laboratory at the University of Wyoming is a dynamic, interdisciplinary, intergenerational space, which incubates research projects and brings researchers, students, and the public together to address Wyoming's and the nation's grandest challenges: making liberty and justice for all a fact of life rather than a distant dream. The Democracy Lab engages our communities in the work of improving the quality of democracy and equality, and seeks to make the University of Wyoming a more inclusive community.

For a Grand Challenge, thinking in terms of decades is insufficient. Therefore, we have designed the Democracy Lab as an inter-generational enterprise. In a decade, our current students will be the thought leaders in their communities. The Democracy Lab will build a pipeline for rising leaders, a structure which harnesses the innovation and energy of students and deploys the wisdom of senior researchers to transform the civic networks throughout Wyoming and the world.

Wednesday, February 2nd – Blockchain in Energy

Faced with challenges at the nexus of climate change and energy, advanced digital technologies such as Blockchain, Smart Contracts, Decentralized Applications, and Internet of Things (IoT) provide unique opportunities for Wyoming, a state at the forefront of Blockchain legislation. Against this background, UW is well-positioned to leverage its capacities to provide innovative research on the applications of these new technologies. By convening a team of interdisciplinary researchers across multiple colleges, this project aims to (1) develop next-generation secure digital platforms, (2) provide UW students with opportunities to gain in-demand skills, (3) engage stakeholders, especially within the energy industry, on a collaborative digital platform, and (4) promote sustainable energy production, transport, and consumption via secure decentralized monitoring and control systems.

Thursday, February 3rd – The UCHAT Project -- Unlocking Community Health Access Together

Wyoming communities face many health challenges, particularly in the state's most rural places where health access and outcomes are lagging. The UCHAT Project seeks to take an interdisciplinary approach to identifying communities' barriers of engagement in public health decisions, trusted sources of health information, and preferred strategies to improve health outcomes. Through a series of interviews and online virtual focus groups, University of Wyoming students, faculty, and Extension Educators, along with the Wyoming Department of Health have explored these challenges and opportunities. This presentation describes the UCHAT Project's initial findings and outlines the project's next steps in building Wyoming's communities' capacity for better health outcomes.

Friday, February 4th – IMPACT -- Innovative Methods to develop Adaptive Capacity through Transdisciplinarity

Science plays a pivotal role in society's ability to address grand challenges, however, segments of society doubt that science can meet modern challenges and distrust information they receive about science. Transdisciplinary research (TDR) offers an approach that centralizes long term relationships, respectful dialogue, power redistribution, and creativity among stakeholders (e.g., between UW and community leaders and citizens). As a 21st-century land grant institution, UW aims to "apply innovation, intelligence and tenacity to meet economic, social and environmental challenges" (strategic plan) -- essentially, to do TDR -- but it is not clear to what extent UW is presently able to do so. Thus, our Grand Challenges seed funding was used to conduct interviews and plan a survey aimed at understanding (1) UW's current capacity for impactful research and (2) the barriers UW academic personnel face in these efforts. Interviews demonstrated a highly diverse set of UW's academic personnel currently pursue transdisciplinary, impactful work. Most are internally motivated to conduct impactful research, have little formal training on this approach, and face consistent barriers in doing so. A survey will be implemented this spring to complement our rich qualitative dataset.

