

MEETING OF THE TRUSTEES OF THE UNIVERSITY OF WYOMING

January 22-24, 2025

PUBLIC SESSION REPORT

University of Wyoming

Vision

Use our unique strengths to make Wyoming and the world a better place.

Mission

As Wyoming's university, we unlock the extraordinary in every person through education, research, innovation, engagement, and service.

Values

- Access to an affordable, high-quality education.
- Real-world education where students learn by doing.
- A welcoming and supportive learning community fostered by integrity, inclusivity, freedom of expression, and respect.
- The growth, health, and leadership capacity of all members of the university community.
- Wyoming's wild and working lands as an asset to be utilized, understood, stewarded, and treasured.
- Our partnership and engagement with Wyoming communities in the creation and exchange of knowledge and resources.
- Our role as a catalyst for innovation and economic vitality.

(Accepted January 2023)



Wednesday, January 22 -Friday, January 24, 2025 Marian H. Rochelle Gateway Center Laramie, Wyoming

UNOFFICIAL MEETING SCHEDULE - COMMITTEE MEETINGS

Wednesday, January 22, 2025

Meeting Location – Marian H. Rochelle Gateway Center Lunch will be provided to Trustees at the meeting location.

7:30 – 10:00 a.m. – Facilities Contracting Committee

Committee Members: Carol Linton (Chairman)/Brad LaCroix/Jim Mathis/John McKinley/Dave True Salon D

10:00 a.m. – Noon – Fiscal and Legal Affairs Committee

Committee Members: Macey Moore (Chairman)/David Fall/ Dave True Salon C

11:00 a.m. – 1:00 p.m. – Biennium Budget Committee

Committee Members: Laura Schmid-Pizzato (Chairman)/Brad Bonner/ Carol Linton/John McKinley Salon D

1:00 - 3:00 p.m. - Research and Economic Development Committee

Committee Members: David Fall (Chairman)/ Brad Bonner/Brad LaCroix Salon C

3:00 - 5:00 p.m. - Academic and Student Affairs Committee

Committee Members: Michelle Sullivan (Chairman)/Brad Bonner/Jim Mathis/Macey Moore/ Laura Schmid-Pizzato Salon C

5:00 – 6:00 p.m. – Legislative Relations Committee

Committee Members: John McKinley (Chairman)/Carol Linton/Laura Schmid-Pizzato First Interstate Conference Room



Wednesday, January 22 -Friday, January 24, 2025 Marian H. Rochelle Gateway Center Laramie, Wyoming

OFFICIAL MEETING SCHEDULE

Thursday, January 23, 2025 Meeting Location: Marian H. Rochelle Gateway Center			
7:00-7:45 a.m.	Informal breakfast at the Holiday Inn		
7:45 a.m.	Travel to the Marian H. Rochelle Gateway Center for the regular Board meeting		
8:00 – 9:30 a.m.	Executive Session [Session I] Meeting Location – Marian H. Rochelle Gateway Center		
9:30 a.m.	Pledge of Allegiance [Marty Martinez, UW Marna M. Kuehne Foundation Veterans Services Center]		
9:45 a.m.	Recognition and Board Resolution: Outgoing Trustees – Brown		
	Introduction of College of Health Science Dean Patrick Hardigan – Turpen		
10:00 a.m.	Update to Board: UW President Ed Seidel		
10:15 a.m.	Enrollment Follow-up: Getting Students Through the Funnel – Seidel/Turpen/K. Moore		
11:00 a.m.	Public Testimony		
11:15 a.m.	Wyoming Community College Commission Adopted Rules related to Applied Baccalaureate – Turpen/Hilaire/K. Moore		
11:30 a.m.	Annual Report: Academic Affairs, Sabbaticals/Leave for previous Academic Year (per UW Regulation 2-16) – Benham-Deal		
11:45 a.m.	Trustees' Annual Discrimination and Harassment, Mandatory Report, and Bystander Intervention Training – Osborn		



Wednesday, January 22 - Friday, January 24, 2025 Marian H. Rochelle Gateway Center Laramie, Wyoming

12:00 p.m.	Lunch honoring outgoing Trustees [by invitation] - Legacy Hall		
1:00 p.m.	Research Excellence Presentation – Water Federalism: Tribal Sovereigns and Transboundary Waters in the American West – Jason Robison13/67		
1:45 p.m.	Presentation and Update: School of Computing – Turpen/Allen14/92		
2:15 p.m.	Annual Report: Division of Research and Economic Development15/105		
	Science Initiative Update – Chitnis		
2:45 p.m.	Break		
3:00 – 5:00 p.m.	Trustee Committee Reports [See Committee Packets]		

Executive Committee; Kermit Brown (Chairman)

 Board to ratify Committee Action on ThermoFisher Scientific Quotations for Helios 5 Hydra UX Plasma Dual Beam and Spectra Ultra High ETEM – REDD/COIFPM (Chitnis/Piri)

Academic and Student Affairs Committee; Michelle Sullivan (Chairman)

- Consideration and Action:
 - Honorary Degrees and Awards recommendations

Biennium Budget Committee; Laura Schmid-Pizzato (Chairman)

- Consideration and Action:
 - o UW Fee Book Proposal for Academic Year 24-25 (per UW Regulation 7-11)
 - o Financial Aid Plan AY 2025-2026/FY2026 (per UW Regulation 7-11)
- Information: Upcoming fiscal year operating budget assumptions and timeline
- Discussion: Six-month budget v. actual of annual operating budget

Facilities Contracting Committee; Carol Linton (Chairman)

Fiscal and Legal Affairs Committee; Macey Moore (Chairman)

Legislative Relations Committee; John McKinley (Chairman)

Research and Economic Development Committee; David Fall (Chairman)



Wednesday, January 22 -Friday, January 24, 2025 Marian H. Rochelle Gateway Center Laramie, Wyoming

<u>Special Event</u> Thursday, January 23, 2025

Celebration of Excellence in Research and Innovation [by invitation] 5:30 p.m. Reception; 6:15 p.m. Dinner and Program
Marian H. Rochelle Gateway Center

Friday, January 24, 2025

8:00 – 10:00 a.m. Executive Session [Session II] Meeting Location – Marian H. Rochelle Gateway Center

10:00 a.m. *Break*

10:15 a.m. Business Meeting Meeting Location – Marian H. Rochelle Gateway Center

Roll Call

Approval of Board of Trustees Meeting Minutes (*Public Session & Executive Session*)

O November 20-22, 2024, and December 11, 2024, UW Board of Trustees Meetings

Discussion: Appointment of New Trustees [as appropriate] – Brown

Appointment of Board of Trustees Officer Nomination Committee – Brown

Trustee Open Discussion on Any Topic

Reports

ASUW – President Kameron Murfitt
Staff Senate – President Adam Comeau
Faculty Senate – Chairman Ray Fertig
Wyoming Community College Commission – Executive Director Ben Moritz

Public Testimony [Scheduled for Thursday, January 23, 2025, 11:00 a.m.]



Wednesday, January 22 -Friday, January 24, 2025 Marian H. Rochelle Gateway Center Laramie, Wyoming

Committee of the Whole

Regular Business

Board Committee Reports [Scheduled for Thursday, January 23, 2025, at 3:00 p.m.]

<u>Trustee Committees</u> - [Note: Committees of the Board will provide reports during the regular work sessions and will not have a formal report to provide during the Business Meeting.]

<u>Liaison to Other Boards</u> –

- UW Alumni Association Board Laura Schmid-Pizzato & Jack Tennant
- Foundation Board Brad Bonner & David Fall
- Haub School of Environment & Natural Resources Michelle Sullivan
- Energy Resources Council Dave True
- Cowboy Joe John McKinley

Proposed Items for Action:

- I. Contracts, agreements, procurements over \$2 million or 10 years in length Evans
- II. Academic Personnel Report (to include Emeritus Faculty Designations) Turpen/Benham-Deal

<u>Information Only Items:</u> [no action, discussion, or work session]

- Contracts and Procurement Report (per UW Regulation 7-2) Evans21/185
- Capital Construction Report Brown/Mai [See Facilities Contracting Committee Packet]
- Foundation Monthly Giving Report Stark

New Business

Date of Next Meeting: February 19, 2025 (video conference)

Adjourn Meeting

AGENDA ITEM TITLE: Enrollment Follow-up: Getting Students Through the Recruitment Funnel, Seidel, Turpen, K.Moore

SESSION TYPE:	APPLIES TO STRATEGIC GOALS:
□ Work Session	
☒ Information Session	☐ Institutional Excellence
□ Other	
☐ [Committee of the Whole – Items for Approval]	☐ Service to the State
11 3	☐ Financial Growth and Stability
	☐ No [Regular Business]
☑ Attachments are provided with the narrative.	
EXECUTIVE SUMMARY:	
In this presentation, university leadership will provi in November 2024 about recruiting and strategic en will be discussed include: (1) improving admits to attributes that attract students.	rollment and marketing strategies. Topics that
PRIOR RELATED BOARD DISCUSSIONS/ACTI In July 2024, President Seidel and members of the unerrollment planning process, shared (1) the state of education landscape, (2) the long-term vision for en Wyoming, (3) addressing the needs of specific stude achieve enrollment goals. In September and November update on recent enrollment strategies and initial outcomes, and progression the UW/LCCC co-advised.	enrollment at UW and the current higher rollment at UW and how it serves the state of ent populations, and (4) planned actions to mber 2024, UW Administration provided an atives including recruitment and marketing
WHY THIS ITEM IS BEFORE THE BOARD: University leadership will provide information about questions posed by the Board in November 2024.	at recruitment and marketing in response to
ACTION REQUIRED AT THIS BOARD MEETIN N/A	IG:
PROPOSED MOTION: N/A	
PRESIDENT'S RECOMMENDATION:	

AGENDA ITEM TITLE: Wyoming Community College Commission Adopted Rules related to Applied Baccalaureate, Turpen, Hilaire, K.Moore

SESSION TYPE:	APPLIES TO STRATEGIC GOALS:
☐ Work Session	
☑ Information Session	☐ Institutional Excellence
□ Other	
☐ [Committee of the Whole – Items for Approval]	⊠ Service to the State
	☐ Financial Growth and Stability
	☐ No [Regular Business]
☑ <i>Attachments are provided with the narrative.</i>	

EXECUTIVE SUMMARY:

The Wyoming Community College Commissioners formed a committee to discuss and consider the implications to statewide higher education if the number of Applied Baccalaureate (AB) degrees allowed to be offered at a Wyoming Community College was increased from two per college. This committee met over the course of several months, wrapping up in June 2024 with a set of recommendations that included removing the cap on the number of AB degrees each Community College could offer and suggested changes be adopted by the Wyoming Community College Commission (WCCC) rules that include formal, non-voting participation of the University of Wyoming in the process. These recommendations are not final as the executive branch may make suggestions during the rules review and approval process.

In this follow-up discussion, University leadership will provide an update on draft procedures for reviewing and submitting a response to proposed AB programs and upper division courses. As part of this effort, existing UW transfer policies, procedures, and criteria for evaluating courses and programs for transfer credit toward UW programs will be reviewed and revised as needed. In addition, a communication plan will be developed that addresses UW's policy for transferring credit that applies toward a UW program/degree.

PRIOR RELATED BOARD DISCUSSIONS/ACTIONS:

In July 2024, President Seidel and members of the university leadership discussed UW's strategic enrollment planning process, shared (1) the state of enrollment at UW and the current higher education landscape, (2) the long-term vision for enrollment at UW and how it serves the state of Wyoming, (3) addressing the needs of specific student populations, and (4) planned actions to achieve enrollment goals. In September and November 2024, UW Administration provided an update on recent enrollment strategies and initiatives including recruitment and marketing outcomes, and progression the UW/LCCC co-advising pilot program. UW Leadership provided the last update in November 2024.

WHY THIS ITEM IS BEFORE THE BOARD:

University leadership will provide information about recruitment and marketing in response to questions posed by the Board in November 2024.

ACTION REQUIRED AT THIS BOARD MEETING:

PROPOSED MOTION:

N/A

PRESIDENT'S RECOMMENDATION:

AGENDA ITEM TITLE: Annual Report: Sabbaticals/Leave Report, Turpen/Bagley **SESSION TYPE:** APPLIES TO STRATEGIC GOALS: ☐ Work Session \boxtimes Yes (select below): \square Other ☐ Student Success ☐ [Committee of the Whole – Items for Approval] ☐ Service to the State ☐ Financial Growth and Stability ☐ No [Regular Business] ⊠ *Attachments are provided with the narrative.* **EXECUTIVE SUMMARY:** Information is provided to the Board about sabbatical and professional development leaves taken by faculty during Academic Year 2023-2024. PRIOR RELATED BOARD DISCUSSIONS/ACTIONS: The Board receives regular information about personnel matters, including but not limited to sabbatical and professional development leaves. WHY THIS ITEM IS BEFORE THE BOARD: Pursuant to University Regulation 2-16 (Sabbatical and Professional Development Leave), the Provost shall submit an annual report detailing the sabbatical and professional development leaves approved for the preceding academic year. ACTION REQUIRED AT THIS BOARD MEETING: No action required. PROPOSED MOTION: No motion required.

PRESIDENT'S RECOMMENDATION:

No recommendation required.

AGENDA ITEM TITLE: <u>Discrimination and Harassment, Mandatory Reporting, and Bystander Intervention Training</u>, Osborn

<u> </u>		
SESSION TYPE:	APPLIES TO STRATEGIC PLAN:	
☐ Work Session	☐ Yes (select below):	
⊠Education Session	☐ Driving Excellence	
☐ Information Item	☐ Inspiring Students	
☐ Other:	☐ Impacting Communities	
[Committee of the Whole – Items for Approval]	☐ High-Performing University ☐ No [Regular Business]	
☑ Attachments are provided with the narrative—re	efer to Supplemental Materials Report.	
EXECUTIVE SUMMARY:		
Per the U.S. Department of Education's 2020 Titl University of Wyoming is required to take specific harassment. Per UW Regulation 4-2, all UW emp discrimination to the University's Equal Opportuni Coordinator. This training session provides a brief freedom of expression and civil discourse, sexual reporting, accommodations for individuals with discourse.	e steps in response to notice of alleged sexual ployees are required to report harassment and ity Report and Response unit and the Title IX f overview of the relevant rules and policies, il harassment and discrimination, mandatory	
PRIOR RELATED BOARD DISCUSSIONS/ACT The Board of Trustees is annually trained on the regulations, rules, policies and procedures.		
WHY THIS ITEM IS BEFORE THE BOARD: Training about these topics is required for all UW employees. While Board members are not mandatory reporters, it is important for the Board to receive information about sexual harassment and discrimination, mandatory reporting, accommodations for a disability, implicit bias and bystander intervention.		
ACTION REQUIRED AT THIS BOARD MEETINN/A	NG:	
PROPOSED MOTION: N/A		

PRESIDENT'S RECOMMENDATION:

AGENDA ITEM TITLE: <u>Indigenizing Water Federalism: Native Nations & Western Compacts</u>-Jason Robison

SESSION TYPE:	APPLIES TO STRATEGIC GOALS:
☐ Work Session	☐ Yes (select below):
☑ Information Session	
☐ Other	
☐ [Committee of the Whole – Items for Approval]	⊠ Service to the State
	☐ No [Regular Business]
oxtimes Attachments are provided with the narrative.	
EXECUTIVE SUMMARY:	

Wyoming and other Western states are parties to twenty-three interstate compacts that mediate their relations over water from transboundary rivers such as the Colorado, Green, and Yellowstone. Rooted in the U.S. Constitution's Compact Clause, these "domestic water treaties" were pathbreaking when they surfaced in the 1920s, during the assimilation era of federal Indian policy. A century later, it's fair to say that, despite their virtues, Western water compacts were built primarily with two types of sovereigns in mind: the states and the United States. Native American tribes—the third type of sovereign within our country—were marginalized. This approach to water federalism should be reconsidered, with tribal water rights being protected in compact apportionments, and tribal representatives being included in compact governance.

Jason Robison - Carl M. Williams Professor of Law and Social Responsibility, UW College of Law; Adjunct Professor, UW Haub School of Environment and Natural Resources; Leadership Team, Water & Tribes Initiative; Member, Colorado River Research Group. S.J.D., Harvard Law School, 2013; LL.M., Harvard Law School, 2009; J.D., University of Oregon School of Law, 2006; B.S., Environmental Studies, University of Utah, 2003.

PRIOR RELATED BOARD DISCUSSIONS/ACTIONS: N/A

WHY THIS ITEM IS BEFORE THE BOARD: Informational item

ACTION REQUIRED AT THIS BOARD MEETING: N/A.

PROPOSED MOTION:

N/A

PRESIDENT'S RECOMMENDATION:

AGENDA ITEM TITLE: Presentation and Update: School of Computing, Turpen, Allen

SESSION TYPE:	APPLIES	TO STRATEGIC GOALS:
☐ Work Session	⊠ Yes (s	select below):
☑ Information Session	\boxtimes	Institutional Excellence
☐ Other	\boxtimes	Student Success
☐ [Committee of the Whole – Items for Approval]	\boxtimes	Service to the State
		Financial Growth and Stability
	□ No [R	egular Business]
☑ Attachments are provided with the narrative.		
EXECUTIVE SUMMARY:		
The School of Computing (SoC) was approved by the inaugural director, Dr. Gabrielle Allen was appointed plan developed by a broad faculty committee and interdisciplinary hub of innovation and knowledge the University of Wyoming (UW) impacting resonative university. The School works to provide University Wyoming businesses and citizens with computation transformation, innovation, and collaboration in the status of the SoC, including personnel, academic impacts.	d in Marc d approv exchange earch, lea of Wyon onal tool state. Dr.	h 2022 and is following a 5-year ed by this board. The SoC is an for computing and digital skills at rning, and engagement across the ning students, faculty and staff, and s, skills, and approaches to drive Allen will provide an update on the
PRIOR RELATED BOARD DISCUSSIONS/ACTI Board approved SoC plan in January 2022. Update Affairs Committee in September 2024.		provided to Academic and Student
WHY THIS ITEM IS BEFORE THE BOARD: Board requested update on progress		
ACTION REQUIRED AT THIS BOARD MEETIN N/A	G:	
PROPOSED MOTION: N/A		
PRESIDENT'S RECOMMENDATION: N/A		

AGENDA ITEM TITLE: Research and Economic Development Division Annual Report, Chitnis **SESSION TYPE:** APPLIES TO STRATEGIC GOALS: ☐ Work Session \boxtimes Yes (select below): **☒** Information Session ☐ Other ☐ [Committee of the Whole – Items for Approval] ⊠ Service to the State ☐ Financial Growth and Stability ☐ No [Regular Business] ☑ Attachments are provided with the narrative. **EXECUTIVE SUMMARY:** The Research and Economic Development Division (REDD) of the University of Wyoming catalyzes expansion of UW's knowledge enterprise, provides experiential learning opportunities for UW students, and facilitates innovation and engagement to support economic development across Wyoming. This report details the continued strategies implemented by the Division in support of UW's strategic objective. PRIOR RELATED BOARD DISCUSSIONS/ACTIONS: Annual Item WHY THIS ITEM IS BEFORE THE BOARD: Annual informational topic provides an opportunity to obtain feedback. ACTION REQUIRED AT THIS BOARD MEETING: N/A. PROPOSED MOTION:

N/A

N/A

PRESIDENT'S RECOMMENDATION:

AGENDA ITEM TITLE: Science Initiative Annual Report, Chitnis, Gatlin

SESSION TYPE:	APPLIES TO STRATEGIC GOALS:
☐ Work Session	
☑ Information Session	
☐ Other	
☐ [Committee of the Whole – Items for Approval]	⊠ Service to the State
	☐ No [Regular Business]
\boxtimes Attachments are provided with the narrative.	

EXECUTIVE SUMMARY:

The University of Wyoming's Science Initiative has demonstrated exceptional impact in advancing STEM education and outreach across the state during the 2023-2024 academic year. Through its signature programs, the Initiative engaged over 5,700 university students in active learning courses, while the Wyoming Research Scholars Program provided 46 talented undergraduates with valuable research opportunities, resulting in multiple peer-reviewed publications and conference presentations. The Initiative's commitment to statewide engagement was exemplified by its Roadshow program, which brought hands-on STEM activities to more than 6,700 K-12 students and seniors across Wyoming communities, while its Learning Actively Mentoring Program continued to transform teaching excellence, with 15 LAMP-trained educators receiving prestigious teaching awards.

The newly established Science Institute marks an exciting expansion of the Initiative's mission, launching 10 innovative research centers and projects focused on strengthening Wyoming's economy through interdisciplinary science. With an initial investment of \$2.375 million in seed funding, these centers and projects have already demonstrated remarkable success. The Institute's state-of-the-art facilities, including the Plant Growth & Phenotyping Facility and the Center for Advanced Scientific Instrumentation, are creating unprecedented opportunities for cutting-edge research, while the award of eight PhD fellowships is helping to build a pipeline of top scientific talent for Wyoming's future. Moving into the future, the Science Institute will continue to facilitate the realization of the Science Initiative's goals and catalyze new scientific discoveries that address Wyoming's needs

PRIOR RELATED BOARD DISCUSSIONS/ACTIONS: Annual Item

WHY THIS ITEM IS BEFORE THE BOARD:

Annual informational topic provides an opportunity to obtain feedback.

ACTION REQUIRED AT THIS BOARD MEETING:

N/A.

PROPOSED MOTION:

N/A

PRESIDENT'S RECOMMENDATION: N/A

AGENDA ITEM TITLE: Retention and Access to Board Meeting Video, London

SESSION TYPE:		APPLIES	TO STRATEGIC GOALS:
☐ Work Session		☐ Yes (se	elect below):
☐ Information Session			Institutional Excellence
⊠ Other			Student Success
☐ [Committee of the W	hole – Items for Approval]		Service to the State
			Financial Growth and Stability
		□ No [Re	egular Business]
☐ Attachments are prov	ided with the narrative.		

EXECUTIVE SUMMARY:

Pursuant to WY ST 16-4-202(a), the university provides inspection of public records, not copies, of Board meeting audio/video. Prior to 2020, only Board meeting audio was archived and made available upon request. The requestor would schedule a time to listen to audio under supervision in Old Main. The COVID-19 pandemic necessitated the expectation of live streamed Board meetings replacing the internal archive of meeting audio with video. In 2021 an internal process was created whereby Board meeting video links are publicly accessible on the Board's public facing website until the next Board meeting.

In response to increased internal and external stakeholder requests for access to archived Board meeting video, it is necessary to create a retention policy and process for public access and perpetual storage of Board meeting video. Conveyed through the Executive Director and Deputy Secretary, the UW Desktop Support Team Manager responds to requests from internal and external stakeholders for access to Board meeting videos by creating a OneDrive link on a case-by-case basis. However, there is no dedicated location for these videos, and supervised reviews are resource intensive.

What the legislature does:

Management Council Policy 06-02 relates to the maintenance of and access legislative records, and Policy18-01 refers to providing live stream video of legislative interim committee meetings and the legislative session. LSO Operations Administrator Tania Hytrek confirmed the legislature's practice that all public portions of meetings are live-streamed and are then posted, maintained and are accessible in perpetuity via its YouTube channel.

Overview of the University of Wyoming Streaming Platforms

UW IT streams Board meetings using two platforms:

- 1. MediaSite (WyoCast): This platform will transition to Yuja, the campus's lecture capture software, by January 2025. After the transition, Yuja will become the new "WyoCast" platform. This change will be seamless for viewers. WyoCast (MediaSite/Yuja) Links can be made available indefinitely (as long as we continue to use MediaSite/Yuja as our campus lecture capture software) and can be shared with the public. IT manages these links to ensure availability. Settings do not allow direct video downloads. However, individuals with sufficient technical expertise may still find ways to capture or record the videos.
- 2. YouTube: A stable, widely used platform that complements Yoast/Yuja. YouTube links are static and accessible immediately after an event ends, requiring no additional updates. YouTube Links are available through the university's YouTube channel indefinitely. These links can be shared but are not easily found via YouTube searches. Settings do not allow

direct video downloads. However, individuals with sufficient technical expertise may still find ways to capture or record the videos.

Streaming on both platforms ensures stability, redundancy, and link consistency: MediaSite/Yuja uses separate links for live and on-demand streaming. After a live stream ends, IT updates the WyoLink address to point to the on-demand link for continued access.

Institutions of higher education committed to transparency (non-comprehensive list):

Cal State University System of Higher Education University of Colorado Boulder Nevada System of Higher Education (including UNLV) University of Montana University of Nebraska System of Higher Education University of Texas System of Higher Education

Access and Archival Capacity at the American Heritage Center

American Heritage Center (AHC) Digital Archivist Dinah Miles has confirmed the AHC has capacity to archive video of Board meetings in perpetuity. Its digital storage system includes three servers, run by UW IT and one by Advanced Research Computing Center (ARCC). Patrons would be able to 1. Visit the AHC's reading room and watch video through one of its onsite access computers or 2. Request a copy of one or more videos to be sent to them through email, Dropbox, or other filesharing services. While not presently available, the AHC hopes in the next year to implement the mechanism to allow patrons access to Board meeting video from any personal device via the AHC website.

What is proposed:

By leveraging existing platforms (YouTube, Yuja, and AHC) and adopting a centralized approach to storage and access, the university can address growing demand for Board meeting videos while ensuring compliance, efficiency, and transparency. We proposed creating a dedicated webpage on the Board's website to house meeting video links for the calendar year. At the beginning of the next calendar year, video will be transferred to the AHC with other permanent Board records for appropriate access and storage. The Board's website will include instructions on how to access archived videos through the AHC website or reading room. We request Board guidance regarding accessibility to its meeting video archives. Based on this guidance the university will develop a retention policy and streamlined process for the perpetual storage and public access of archived Board meeting videos, ensuring compliance with state law and aligning with institutional retention standards.

PRIOR RELATED BOARD DISCUSSIONS/ACTIONS:

In February 2022, the Board approved the Departmental Administrative Policy and Procedure (DAPP): Board of Trustees Records Transfer to the American Heritage Center which clarifies responsibilities of the Board of the Trustees and the American Heritage Center regarding care, handling, preservation, and access to the Board's permanent records. The recommended process related to Board meeting video will align with the steps outlined in the DAPP.

WHY THIS ITEM IS BEFORE THE BOARD:

Requesting Board preference regarding accessibility to its meeting video archives. Based on this guidance the university will develop a retention policy and streamlined process for the perpetual storage and public access of archived Board meeting videos, ensuring compliance with state law and aligning with institutional retention standards.

ACTION REQUIRED AT THIS BOARD MEETING:

PROPOSED MOTION:

I move the Board authorize the Executive Director and Deputy Secretary create and maintain a dedicated page on the Board's website to house Board meeting video links for the calendar year and at the beginning of the next following calendar year, transfer video to the American Heritage Center with other permanent Board records for appropriate access and storage.

PRESIDENT'S RECOMMENDATION:

AGENDA ITEM TITLE: Faculty Workload Report, Benham Deal

SESSION TYPE:	APPLIES TO STRATEGIC GOALS:
☐ Work Session	☐ Yes (select below):
☐ Information Session	
⊠ Other	☐ Student Success
☐ [Committee of the Whole – Items for Approval]	☐ Service to the State
	☐ Financial Growth and Stability
	☐ No [Regular Business]
riangleq Attachments are provided with the narrative.	
EXECUTIVE SUMMARY: Faculty conduct numerous activities that support the research and/or creative activities, administration, extension. The University maintains a flexible wo capitalize on each faculty member's strengths to me academic unit. This report provides an analysis of fac	advising, service/outreach/engagement, and orkload policy that allows academic units to eet the mission of the university, college, and
PRIOR RELATED BOARD DISCUSSIONS/ACTI N/A	ONS:
WHY THIS ITEM IS BEFORE THE BOARD: University Regulation 2-9 (Workload Policy) requ providing an analysis of faculty workload.	nires the Provost to submit an annual report
ACTION REQUIRED AT THIS BOARD MEETIN	IG:
N/A	
PROPOSED MOTION: N/A	
PRESIDENT'S RECOMMENDATION: N/A	

AGENDA ITEM TITLE: Service Contract and Procurement Reports, Evans

SESSION TYPE:	APPLIES TO STRATEGIC GOALS:
☐ Work Session	☐ Yes (select below):
☐ Information Session	☐ Institutional Excellence
⊠ Other	☐ Student Success
☐ [Committee of the Whole – Items for Approval]	☐ Service to the State
	☐ Financial Growth and Stability
	□ No [Regular Business]
☐ Attachments are provided with the narrative.	

EXECUTIVE SUMMARY:

Per UW Regulation 7-2 (Signature Authority), unless otherwise limited by UW Regulation or reserved by the Board of Trustees, the President shall have authority to approve and/or sign University contracts, federal contracts, agreements, memorandums of understanding, and procurements that involve an external party, require consideration (paid or received) valued less than \$2,000,000 (one-time or in aggregate), and for which the term is less than ten years. The President may delegate this authority to University Officers for such contracts, federal contracts, agreements, memorandums of understanding, and procurements that require consideration (paid or received) valued less than \$1,000,000 (one-time or in aggregate) and for which the term is less than five years.

As required by the Regulation, attached are the following reports:

- 1) Service Contracts (including contracts, federal contracts, agreements, and memorandums of understanding) valued at \$50,000 or above (one-time or in aggregate) from October 16-December 15, 2024
- 2) Procurements valued at \$50,000 or above (one-time or in aggregate) from October 16-December 15, 2024

Service contract workflow

Per the University's Standard Policy and Procedure (Signature Authority), the President can delegate signature authority to University officers for service contracts valued less than \$1,000,000 (one-time or in aggregate) and for which the term is less than five years.

Procurement workflow

Cost Center Managers (business manager level or designee) approve all purchases, and are the final approvers for purchases of \$99,999 or less. Deans/Associate Vice Presidents are the final approvers for purchases between \$100,000 and \$499,999. Vice Presidents are the final approvers for purchases between \$500,000 and \$999,999. The President is the final approver for purchases between \$1,000,000 and \$1,999,999. The Board of Trustees approves purchases of \$2,000,000 and above.

PRIOR RELATED BOARD DISCUSSIONS/ACTIONS:

Standing information item at each in-person Board of Trustees meeting.

WHY THIS ITEM IS BEFORE THE BOARD:

Per UW Regulation 7-2 (Signature Authority), at each regular meeting of the Board of Trustees (excluding conference calls), the President shall provide a written report to the Board of Trustees identifying each contract, federal contract, agreement, memorandum of understanding, or procurement valued at \$50,000 or above (one-time or in aggregate) signed by the President or designee under this provision.

ACTION REQUIRED AT THIS BOARD MEETING:

N/A. Information Only.

PROPOSED MOTION:

N/A. Information Only.

PRESIDENT'S RECOMMENDATION:

N/A. Information Only.

AGENDA ITEM TITLE: Enrollment Follow-up: Getting Students Through the Recruitment Funnel, Seidel, Turpen, K.Moore

Enrollment Follow Up

THE WORLD NEEDS MORE RELENTIESS CURTOSITY.

Enrollment Follow Up

- 1. Improving Admits to Enrolled
- 2. New Efforts & Initiatives
- 3. Attributes that Attract Students

THE WORLD NEEDS MORE
RELENTIESS CURTOSITY.

1. Improving Admits to Enrolled

Identifying the Student Experience: UW Committee

Leaders from key units responsible for the student experienced began meeting in December to build a comprehensive map of the student journey.

Mapping the experience of:

- First Time Students
- Transfer Students
- Continuing Students

How well do we support the student through this journey?

Broad representation:

- Shelley Dodd Director of Admission (co-chair)
- Abby Markley Associate Dean of Student Success and Graduation (co-chair)
- Whit Madere Director Internal Audit (facilitator)
- Eric Webb Associate Vice President of Business Enterprises
- Anna Terfehr Director of Scholarships and Financial Aid
- Matt McDermit Associate Director Enrollment Marketing
- Justin Rowe Associate Director Retention Marketing
- Richard Miller Director of the Center for Advising and Career Services
- Tina Matthews Manager of Academic Advising A&S
- First Year Student
- Transfer Student

Additional teams and subject matter experts have been incorporated into this effort.

1. Improving Admits to Enrolled

SUSPECTS BUILD AWARENESS INQUIRIES and PERSONALIZED **ENGAGEMENT** Mailings, emails, social media, texts **APPLICATIONS** Recruiters travel. on-campus events, phone calls **ADMITS CONFIRMS CONVERSION** Mailings, emails, social media, texts **ENROLLED UW** On-campus events STUDENT! Personalized follow-ups

Tailored messaging

Across the 6 stages of a student's path to UW, there are ~70 actions that must be taken to enroll.

- ~20 of these steps the university takes the initiative to support the student
- ~50 rely on the student to take initiative and navigate by themselves

The result: **More than 70% of** actions rely on the student to navigate.

Our focus is reducing the burden of responsibility on the student!

Process improvement, burden shift, reduction of requirements.

1. Improving Admits to Enrolled

Early Improvements and Response

Registration and Advising processes have broad impacts on both incoming and continuing students, influencing both recruitment and retention.

Improvements and adjustments already acknowledged:

- Implementing best practices across colleges
- Increased availability and accessibility to advisors
- Improved communication with students

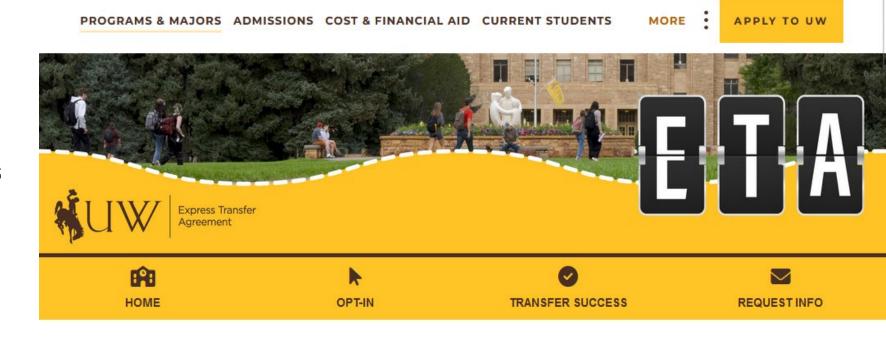
Lead by the Provost and Vice Provost for Undergraduate Education, in collaboration with Associate Deans, Advising Managers and the SEM Working Group, the outcome of the registration and advising process review is to achieve a premier advising experience for all UW students.

We must replicate success occurring in isolation, across campus for the benefit of all students.

2. New Efforts & Initiatives - ETA

Co-Admission and Co-Advising Benefits

- 1. Locked in degree plans
- 2. Early UW Experience
- 3. Hassle Free Transfer
- 4. Ongoing Support
- 5. Credit Transfer
- 6. Fast-Track to Degree



EXPRESS TRANSFER AGREEMENT

Welcome to the Express Transfer Agreement (ETA) program—a pathway designed for Laramie County Community College (LCCC) students in select majors aiming to complete their bachelor's degree efficiently. With ETA, you'll enjoy express transfer status, co-admission to the University of Wyoming (UW), and co-advising to ensure that every credit you earn counts toward your degree.

3. Attributes of UW – What is attractive

UW's Value Proposition and Marketing

Academics

- Quality programs
- World class faculty and facilities
- Small class sizes
- Digital Offerings

Experiential Learning

- Internships
- Workforce Preparation
- Study Abroad

Community & Lifestyle

- Campus Life & Student Activities
- New Residence Halls
- Free Expression
- The World Needs More Cowboys
- Outdoor Adventure & Location

Affordability

- Scholarships
- Low tuition
- Undergraduate Research

Out of state students' response: Most attractive attributes of UW

- 1) Academics
- 2) Community & Lifestyle
- 3) Location
- "After visiting many excellent programs in urban environments, I know that a program that offered rigorous, excellent dance education, but in a place that also offered an easy escape to real outdoor recreation. UW meets that desire exactly."
- "Ride for Brand", is the motto of the Cowboys and all it stands for is the reason I want to go to UW. It means to have loyalty, dedication, and pride for anything you do. The world needs more cowboys and that starts at UW."
- "After my visit, I loved the environment, and the nature was beautiful. The faculty members that I interacted with were all amazing and very helpful."



THE WORLD NEEDS MORE
RELENTIESS CURTOSITY.

AGENDA ITEM TITLE: Wyoming Community College Commission Adopted Rules related to Applied Baccalaureate, Turpen, Hilaire, K.Moore

Wyoming Community College Commission

Adopted Rules related to Applied Baccalaureate

THE WORLD NEEDS MORE RELENTIESS CURTOSITY.

Proposed AB Degrees – UW Analysis

UW's Internal Academic Review Process

- Analysis of Overlapping Course/Program
- Degree Program Structure
- Proposed Curriculum
- Learning Outcomes
- Industry Data
- UW Student Data



Departmental Administrative Policy and Procedure

▲ Subject: Notice of Applied Baccalaureate proposals at a Wyoming Community College Number:

I PURPOSE

To establish procedures for review and response to the Wyoming Community College Commission (WCCC) regarding courses, programs, and impact related to proposed applied baccalaureate degrees.

II. TERMS AND DEFINITIONS

Academic Affairs Council (AAC): The WCCC recognizes the Academic Affairs Council, reporting through the Executive Council, as the representative body for district chief academic officers on academic policy matters that require system-wide coordination.

	Proposed AB Review - Assessment of Impact Workbook		
UW Units to respond			
AA .	Proposed AB Degree Title :	i.e. Management and Leadership	
AA	Proposing College:		
AA	Proposed Starting Term:	1	
AA	UW College/Unit(s) reviewing:		
	Please list all applicable UW degrees where duplication occurs:		Please indicate all current modes of delivery of the correspond UW program: i.e., In person, Online, UW Casper
	AB degree Program Structure: Please indicate what percentage of courses are duplicative with current UW courses:		
OTR	Lower Division:	i.e. 30%	Please indicate all courses considered as duplicative: i.e., ELGL 1410, MGMT, 4420
OTR	USP:		
Dept	Upper Division:		
Dept	Courses required for the compared UW major:		



UNIVERSITY OF WYOMING

Departmental Administrative Policy and Procedure

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Academic Affairs Council (AAC): The WCCC recognizes the Academic Affairs Council, reporting through the Executive Council, as the representative body for district chief academic officers on academic policy matters that require system-wide coordination.

Applied Baccalaureate (AB) (also known as BAS-Bachelor of Applied Science): Applied baccalaureate degree programs are designed specifically for students who already have applied associate's degrees or similar credentials in a technical field. AB programs often lead to degrees like the Bachelor of Applied Science (BAS). Credits accumulated in applied associated degree programs do not readily transfer to traditional baccalaureate programs. Thus, the BAS degree programs are specifically designed to provide these students with an opportunity to advance their professional skills. Source: Wyoming Association of Community College Trustees.

Wyoming Community College Commission (WCCC): The Wyoming Community College Commission is a network of public community colleges. It aims to provide coordination, advocacy, funding and accountability for the Community College System on behalf of the State of Wyoming.

III. PROCEDURES

- A. The Provost will submit a written request to the Board of Trustees that the Executive Director of the WCCC provide the Board with regular updates on AB rules and procedures that ensure sufficient advance notice to UW of an AB proposal.
- B. The Provost will submit a written request to the Chief Academic & Student Services Officer of the WCCC that (1) the Provost is provided sufficient notice of proposed AB program discussions at any AAC meetings, and (2) the university be provided at least 30 days to respond to proposed AB degrees, once all discussions relating to the

- proposed degree have been held. The Provost will attend or send a designee to participate in all meetings/discussions regarding new AP programs.
- C. When a new AB program is proposed by a Wyoming Community College, the WCCC shall request information from the University of Wyoming Provost regarding any active Baccalaureate degree programs at the University of Wyoming that meets the workforce needs addressed by the proposed AB program. The university will provide a response to the proposed AB degree, within 30 days of the last discussion of the AAC concerning the proposed degree(s).
- D. When the application for a new AB program is made available, the Provost will notify and provide a copy of the application materials to the following individuals.
 - University President, who will share the notice and proposal with the Cabinet and Executive Committee of the Board of Trustees.
 - Affected dean(s) and academic unit head(s), who will share the notice and proposal with Applicable faculty or subject matter experts
 - Faculty Senate Chair, who will share the notice and proposal with the Executive Committee and Faculty Senate Course Review Committee for specific course approvals, and/or the Faculty Senate Academic Planning Committee for program proposals
- E. In collaboration with colleges and academic units, the Provost or designee will complete an assessment of any active or planned Baccalaureate degree programs at UW that meet the workforce needs addressed by the proposed AB, including the current or planned future availability of these programs through online delivery.
- F. Details of the request for review of program proposals will come to the dean, academic unit head, and faculty from the Provost. This request will include expectations for timeline of response, including any necessity for expedited reviews, and guidelines for considerations during the review process.
- G. Colleges and academic units will complete:
 - An evaluation of the proposed AB program to determine if it duplicates programs offered at UW and an assessment of whether existing or planned programs at UW meet the identified workforce needs.
 - The identification of any upper-level courses in the proposed AB program that duplicate courses offered at UW, and, if so, whether existing or planned coursework offered at UW is sufficient to meet workforce needs.
- H. Review of upper division courses in the proposed AB program for the purpose of transferability to UW will follow as appropriate, the timeline outlined in the Standard Administrative Undergraduate Transfer Policy.

- I. Details of the request for review of program proposals will come to the dean, academic unit head, and faculty from the Provost. This request will include expectations for timeline of response, including any necessity for expedited reviews, and guidelines for considerations during the review process.
- J. Upon completion of the college/unit assessment, the Provost or designee will prepare a draft response that outlines the official position of the University of Wyoming regarding the proposed AB degree program. The response will be provided to the President and the Executive Committee of the UW Board of Trustees for feedback before the final report is submitted to the WCCC Chief Academic and Student Services Officer (CASSO). The final report may include a response from the President and/or Board of Trustees.

Note: The University will establish a communication plan that addresses methods for articulating AB courses that transfer to UW programs, which may include a proposal to revise the Undergraduate Transfer Policy to codify expectations for communications.

Responsible Division/Unit: Provost/Academic Affairs

Source:

Links: https://communitycolleges.wy.edu/ Associated Regulations, Policies, and Forms:

Approved: 11-1-2024

University of Wyoming assessment of impact - proposed AB degree

Purpose:

The University of Wyoming has been requested to respond to a proposed AB degree being recommended to the Wyoming Community College Commission. Please provide a response outlining the potential impacts of the proposed Applied Baccalaureate degree. Please use the accompanying workbook to provide your analysis, supporting data and research that support your assessment of the potential impact the poposed AB degree would have on existing programs at the University of Wyoming.

General Program Information Comparison:

Community College Name:
Proposed AB Program Title:
University of Wyoming College/Unit:
University of Wyoming BS/BA Program Title:
UW Mode of Delivery:
Accreditation Status of UW Program:
TIMEFRAME: Have 30 days to respond from received.
Days 0-1(VPUE), Days 2-15 (unit/college), Days 16-20 (VPUE), Days 21-29
(Provost/President/ExecCom BOT), Day 30 respond
*Provost/President/ExecCom of BOT will be notified immediately when a proposal is received.
AB degree review structure:

Please compete the attached workbook and return applicable data and responses according to the timeframe above.

- 1. Curricular overlap
 - a. Duplication of mission and/or curriculum
 - b. Overlap of existing offerings/courses
- 2. Industry impact
- 3. Student success metrics

Please direct all questions and responses to the Vice Provost for Undergraduate Enrollment. mhilaire@uwyo.edu

Proposed AB Review - Assessment of Impact Workbook

Categories/UW

Units to respond

VPUE Proposed AB Degree Title: i.e. Management and Leadership

VPUE Proposing College: VPUE **Proposed Starting Term:** UW College/Unit(s) reviewing: VPUE

Curricular Overlap: Please address the following:

Dept head List all applicable UW degrees where duplication occurs:

AB degree Program Structure: Please indicate what percentage

i.e. 30%

Response here:

of courses are duplicative with current UW courses: Dept head

OTR Lower Division:

OTR USP:

Dept head **Upper Division:**

Dept head Courses required for the compared UW major: Dept head Total percentage of duplicative course content:

Dept head What percent of learning outcomes overlap:

Does the proposed AB degree represent a duplication of

current a UW program: Dept head Yes/No

Does the proposed AB degree represent a duplication of

Dept head proposed UW program: Yes/No

Industry Impacts Please address the following:

Please summarize: Any market analysis relative to the existing

UW degree and attach any market analysis in support of this

summary. Summary Here: Dept head

UW Workforce Delivery

Please provide: Current number of university faculty, academic professionals, lecturers, professors of practice and staff in

Dept head support of the existing UW degree.

Please provide a short response outlining your departments

Dept head support/disagreement with this AB proposal

Please Provide: Grays and Associates Data OCE Please Provide: Lightcast Data OIA

Student Success Metrics

Please provide: The number of enrollments and for the past 5

OIA

OIA Please provide: The number of graduates over the past 5 years

OIA Please provide: Current retention rate for the UW program

NOTE: All questions and response should be directed to the Vice Provost for Undergraduate Education.

PLEASE REVIEW & ADHEAR TO ALL RESPONSE TIMEFRAMES

Please indicate all current modes of delivery of the

Please indicate if this degree requires an correspond UW program: i.e., In person, Online, UW Casper accredidating bodies approval (ie not HLC)

Please indicate all courses considered as duplicative: i.e.,

ELGL 1410, MGMT, 4420

Please indicate course delivery (in person, online-real time, oneline- asynchronous)

Additional Comments

AGENDA ITEM TITLE: Annual Report: Sabbaticals/Leave Report, Turpen/Bagley



REPORT ON 2023-2024 SABBATICAL AND PROFESSIONAL LEAVES

OVERVIEW

Any tenured member of the University faculty may apply for sabbatical leave for the purpose of increasing the recipient's professional competence and usefulness to the University. Sabbatical leave time may be used for research, writing or study at a place of the recipient's choosing. University personnel holding tenured faculty rank whose duties are primarily administrative are also eligible for sabbatical leaves. A minimum of six years of academic service at the University must precede each period of sabbatical leave, although no right accrues automatically through lapse of time. Sabbatical leaves are not ordinarily available for the purpose of obtaining an advanced degree. A faculty member who fails to return to the University for at least one academic year immediately following a sabbatical leave is obligated to repay the amount of compensation received from the University during the period of his or her leave.

Pursuant to University Regulation 2-16 (Sabbatical and Professional Development Leave), this annual report details the sabbatical and professional development leaves approved for Academic Year (AY) 2023-2024.

A total of **34** faculty were approved by the President for sabbatical and professional development leaves. One (1) faculty cancelled their leave prior to the start date and two (2) faculty deferred their sabbaticals until the 2024-2025 academic year. A total of 31 sabbatical and professional development leaves were completed in the academic year.

Twenty-three (23) faculty completed semester-long or half-year projects and eight (8) faculty completed year-long projects. Leaves for a semester or half-year for fiscal year employees are compensated at the annual rate for the limited period. Faculty on full year leaves are compensated at a rate equal to 60% of their annual salary; the remaining 40% of the annual salary is available to the College deans to redeploy for the purpose of ensuring that instructional and other department and college needs are met while the faculty member is on leave.

Below are statements provided by the faculty members that summarize their projects and the benefits and impacts of their work.

ABSTRACTS

College of Agriculture, Life Sciences and Natural Resources

Hufford, Kristina Department of Ecosystem Science and Management

Fall 2023 Sabbatical Leave

Sabbatical projects contributed to reclamation practices in oil sands extraction, continued work to improve restoration outcomes for native species, developed new research programs in post-mining reclamation and seed harvesting, and worked on priority effects in restoration seeding. These efforts collectively contribute to enhancing restoration outcomes, reducing ecological impacts, and fostering economic opportunities within the field of ecological restoration.

Krist, Amy Department of Zoology & Physiology

Academic Year Sabbatical Leave

Associate Professor Krist's sabbatical met her first outcome of increasing her research capacity by developing, writing, and submitting a proposal to the National Science Foundation and receiving the grant. Associate Professor Krist's sabbatical met her second outcome of increasing her aptitude and proficiency with collaborative learning techniques by completing a year-long teaching and learning fellowship (LAMP Science Initiative Summer Institute and Year-long Training program).

Laughlin, Daniel Department of Botany

Academic Year Sabbatical Leave

Professor Laughlin spent his sabbatical at the University of Maine and Oxford University. The collaboration in Maine led to a paper published in *Science* titled 'Trees have overlapping potential niches that extend beyond their realized niches'. Professor Laughlin delivered invited lectures at the University of Maine, UC Davis, Oxford University, Cambridge University, and the University of Prague. He published a synthesis in *Biological Reviews* and has three other manuscripts close to submission. Professor Laughlin also received \$257,909 in external funding from federal agencies to support his research program.

Levy, Daniel Department of Molecular Biology

Spring 2024 Sabbatical Leave

Overall, Professor Levy's sabbatical increased his professional competence and usefulness to the University. His time was focused on manuscript and grant writing. The sabbatical provided the dedicated time Professor Levy needed to complete this work, which has expanded the scope and potential of research in his lab. He greatly appreciates the opportunity to engage in what he views as a successful sabbatical.

McElwain, Alyssa Department of Family and Consumer Sciences

Academic Year Sabbatical Leave

During my sabbatical, I developed relationship skills curricula with the Dibble Institute, creating a program for 5th-6th graders and initiating additional curricula for middle and high school students. I also advanced research on youth relationship education, including validating the Youth Programs—Community Education Environment Scale (YP-CEES) and evaluating a peerled relationship program for college students. These projects led to three manuscripts under review and two presentations highlighting best practices for peer-led programs and insights into effective youth relationship education.

Merav, Ben-David Department of Zoology & Physiology

Fall 2023 Sabbatical Leave

During Professor Ben-David's Sabbatical in Fall 2023, she spent the month of October in Sumatra, Indonesia. She was accompanied by a senior undergraduate student, Lindsey Mitchell, who has been involved with orangutan conservation since she was 13 years old. In West Sumatra (10/2-21), Professor Ben-David taught 2 workshops and delivered 2 talks to faculty, graduate and undergraduate students at Andalas University in Padang. She also helped develop a monitoring program for endangered small, clawed otters. In North Sumatra (10/21-31), they visited multiple conservation sites (tigers, primates, agroforestry), learned the challenges, and provided recommendations where applicable.

College of Arts & Sciences

Aragon, Cecelia Department of Theatre & Dance

Spring 2024 Sabbatical Leave

During Professor Aragon's semester-long sabbatical in Spring 2024, she was able to narrow her focus on the following: 1. Research on her manuscript: *Performing the Myths of "El querido" Billy the Kid-El Bilito: Cultural Politics in Folk Songs, Folk Celebrations, and Contemporary Dramas*, which is under contract with the University of New Mexico Press. 2. Research comparison on "Myths and Legends in USA, Sweden, and Spain," 3. Professional Development in Alexander Technique in Sweden and 4. Preparations for teaching a Study Abroad in Spain; establishing partnerships/connections with universities in Barcelona and Palma de Mallorca and creating a course syllabus, itinerary, and budget for a Study Abroad course at UW in Summer 2025.

Bridgeman, Jacquelyn School of Culture, Gender, and Social Justice

Spring 2024 Sabbatical Leave

During her sabbatical leave, Professor Bridgeman completed one book project, <u>College Success</u> <u>for Students of Color: An Assets Based Approach</u>, which was published by Teacher's College Press in September 2024. She also conducted extensive research which will result in at least one, if not two, books focused on issues of equality in America which it is anticipated will be submitted for publication in the next year to 18 months.

Chen, Yi-Ling School of Politics, Public Affairs, & International Studies

Fall 2023 Sabbatical Leave

During Associate Professor Chen's sabbatical, they had the privilege of spending a semester at the University of British Columbia, hosted by Jamie Peck, a renowned geographer. Associate Professor Chen also visited Seoul National University and Osaka Metropolitan University, further enriching their research experience. During this time, they completed two journal papers and two book chapters, all slated for publication in 2024 and 2025.

Gellis, Brandon Department of Visual & Literary Arts

Academic Year Sabbatical Leave

During his sabbatical, Associate Professor Gellis participated in a Fulbright Distinguished Scholars Award fellowship in Israel. For his research, he interviewed street artists and documented and cataloged the ephemeral layering of street art that represented ongoing cultural conflicts and war. Associate Professor Gellis's future research project will be a full-length book that will contribute significantly to broader discussions on the role of visual culture in conflict zones, situating Israeli and Palestinian street art within a global context of art as resistance and recovery.

Hsu, Chia-Fang (Sandy) Department of Communication and Journalism

Fall 2023 Sabbatical Leave

During Professor Hsu's sabbatical leave in Fall 2023, she conducted interviews for her research in Taiwan, wrote a literature review, and developed and distributed a survey questionnaire. She also submitted a humanities fellowship project titled: "Marriage Expectations in Taiwan: Marriage Readiness Beliefs, Attitudes toward Singlehood, and Interpersonal Communication Skills as Explanations." Professor Hsu intends to present and publish the findings of this research at a major international conference and reputable journal.

Klages, Ricki Department of Visual & Literary Arts

Fall 2023 Sabbatical Leave

Ricki Klages, Professor of Art-Painting, was awarded a sabbatical in Fall 2023. During this time, Klages traveled to Iceland and the UK to document landscapes and Neolithic sites for her creative research in landscape painting. In addition, Klages worked extensively in her studio, completing paintings for several exhibitions. Current exhibitions of this new work this Spring 2024 are featured at William Havu Gallery, Denver, CO, Galerie Knud Grothe, Charlottenlund, Denmark, and numerous exhibitions nationally including California and Pennsylvania.

Piccorelli, Justin School of Politics, Public Affairs, & International Studies Fall 2023 Sabbatical Leave

Departed from University.

Seitz, Thomas School of Politics, Public Affairs, & International Studies Spring 2024 Sabbatical Leave

Associate Professor Seitz's research sabbatical, coupled with a Fulbright ASEAN Research award, enabled him to greatly advance his research as well as build upon new and existing ties with universities in Southeast Asia. A new collaborative book project is underway, an article with US and Indonesian collaborators has been submitted for review, and a new article is in preparation for his field's top conference next year. He is working with colleagues at one Indonesian university to develop a certificate program that would interest Wyoming students, and is developing a new, faculty-led course to take UW students to the region in 2026. In short, Associate Professor Seitz is grateful for his sabbatical and the opportunities afforded thereby.

Small, Nancy Department of English Fall 2023 Sabbatical Leave

At the beginning of her fall 2023 sabbatical semester, Associate Professor Small traveled to multiple archives and began making substantive progress on two book projects supporting her application to Full Professor. However, that progress was put on hold when the President, Provost, and A&S Dean asked her to apply for a Mellon Foundation award. Associate Professor Small turned her sabbatical time towards writing a 11,200-word grant application focused on launching the PhD in English and undertaking a three-year state-wide storytelling project. In December 2023, she was notified of the successful funding of "Re-Storying the West for a Transformative Future: We Are Wyoming" in the amount of \$850,00. While Associate Professor Small is happy to lead this important effort on behalf of the university, college, and department, the scale and weight of the grant project also present complex challenges to other projects required for her future promotion packet.

Surovell, Todd Department of Anthropology

Spring 2024 Sabbatical Leave

During Professor Surovell's Spring 2024 sabbatical, he became a father and made significant progress on a book, submitting an article for publication and contributing to four other published journal articles. He completed two chapters of his book, detailing the results of his five-year ethnoarchaeological project in northern Mongolia. Professor Surovell also co-authored a manuscript about the proteomic analysis of bone needles from the La Prele Mammoth site.

College of Business

Zheng, Kenneth Department of Accounting & Finance

Fall 2023 Sabbatical Leave

During Dr. Zheng's sabbatical in Fall 2023, he and his coauthor investigated the implications of the country-level aggregate sales decline on firms' cost stickiness. They found that the country-level aggregate sales decline is negatively associated with individual firm's cost anti-stickiness, contrary to the positive association between firm-level sales decline and cost stickiness which has been documented extensively in the literature. Their paper is currently under the 2nd round review at *Asian Review of Accounting*, a high-quality accounting journal on the ABDC journal ranking list.

College of Education

Nganga, Lydiah School of Teacher Education

Fall 2023 Sabbatical Leave

Professor Lydiah Nganga has published one academic article in a scholarly journal and has another currently under review. She presented her work at two national conferences and at the School of Teacher Education. Professor Nganga aims to continue using the insights gained during her sabbatical to enrich her teaching and contribute to teacher development both within the College of Education and nationally through presentations. Additionally, Professor Nganga plans to develop further publications related to this work and continue supporting the education of Native American students in Wyoming.

College of Engineering and Physical Sciences

Barker, Michael

Department of Civil and Architectural Engineering and Construction Management Fall 2023 Sabbatical Leave

There is a need for a steel bridge design certificate program since not many universities teach bridge design due to resources, and bachelor graduates do not have room in their academic

programs if the university does teach a bridge course. The sabbatical produced a 6-Part on-line certificate education program, Short Span Steel Bridge Design. The certificate program was leveraged to develop a UW semester course, CE 5270 Bridge Design.

Clementz, Mark Department of Geology and Geophysics

Academic Year Sabbatical Leave

Though initial research objectives in Israel were disrupted by terrorist and military activities in the region that followed events of October 7, 2023, Professor Clementz was able to adjust research activities to maximize scientific relationships with colleagues at the Steinhardt Natural History Museum in Tel Aviv. This involved stable isotopic analysis of historical specimens of marine mammals from the Red and Mediterranean Seas to assess how the ecology of these endangered species has shifted over the past fifty years. Professor Clementz was also able to secure a three-month research stay as a senior research fellow at the Max Planck Institute for Geoanthropology through the Alexander von Humboldt Foundation. While there, he worked on resolving the dietary ecology of extinct marine mammal species from Holocene and Pleistocene sites in the Arctic.

Gamboa, Ruben

Department of Electrical Engineering and Computer Science

Spring 2024 Sabbatical Leave

Dr. Gamboa spent the spring semester of 2024 on sabbatical leave at the Kestrel Institute, which has expertise in an area of computer science that is very near to his. While his interests have been in the application of formal methods to formalizing mathematics, Kestrel takes a much more applied approach to formalization. The experience of using formal verification technique in the context of national defense was the most valuable aspect of his sabbatical.

Kaszuba, John Department of Geology and Geophysics

Fall 2023 Sabbatical Leave

Professor Kaszuba took Sabbatical Leave for the Fall 2023 Semester and was hosted by the GeoEnergy Research Group of the Lyell Centre at Heriot-Watt University (HWU) in Edinburgh, Scotland. A Memo of Understanding for collaboration and exchange between the University of Wyoming and HWU was signed in Spring 2024 because of his sabbatical activities. Professor Kaszuba's and his sabbatical host are developing a proposal to fund critical minerals research; their goal is to submit the proposal in early 2025 to a funding program jointly administered by the US and UK.

Kobulnicky, Henry (Chip) Department of Physics and Astronomy

Fall 2023 Sabbatical Leave

Professor Kobulnicky spent the Fall 2023 sabbatical helping repair the Wyoming Infrared Observatory telescope after a June 2023 lightning strike destroyed its control system. He wrote

computer code to control the telescope's secondary mirror using a solid-state motion controller, learned the motion control code for the new Omron motion controller that will run the observatory, and wrote code to control the power to key observatory circuits from a command line python language interface.

Urynowicz, Michael

Department of Civil and Architectural Engineering and Construction Management *Academic Year Sabbatical Leave*

Report not submitted.

Wang, Liping

Department of Civil and Architectural Engineering and Construction Management *Academic Year Sabbatical Leave*

During Associate Professor Wang's sabbatical leave between September 2023 and June 2024 at MIT, she focused on exploring collaborative research opportunities in controlled environment agriculture (CEA) and transferred her fundamental knowledge of architectural engineering into innovative CEA design and operation solutions at individual facility and community scales. Wang organized a two-day UW CEA workshop with Plenty, Inc. (19 speakers from academic institutions and industries and over 70 participants), delivered six presentations at national and international levels, and prepared a CEA review paper for *Science of Plants* (a *Nature* journal). The content of this manuscript becomes the foundation of various proposals including the NSF Engineering Research Center proposal (preliminary proposal submitted in September 2024) together with a transdisciplinary team including 23 experts across nine institutions.

Zhang, Ye Department of Geology and Geophysics

Spring 2024 Sabbatical Leave

Professor Zhang's sabbatical leave in Spring, 2024 has (1) enhanced her interdisciplinary research and leadership skills; (2) allowed her time to teach on a worldwide educational platform; (3) served the academic community with her participation as a DOE review panelist; (4) established outreach with the U.S.F.S. so their study on natural forest regeneration will benefit forest management; and (5) allotted time to write and submit new proposals. These activities are aligned with the mission and vision of the UW Strategic Plan and CEPS and will bring benefits to the UW academic community.

Zhou, Jing Department of Chemistry

Spring 2024 Sabbatical Leave

The sabbatical leave provided the necessary resources and means for Professor Zhou to exchange ideas and collaborate at both domestic and international levels with experimental and computational experts in the field of catalysis, energy, and materials science. It helped Professor Zhou to expand the research scope for grant submissions and produce joint publications. It also helped educate and mentor students at the University of Wyoming.

College of Law

Alexander, Melissa

Fall 2023 Sabbatical Leave

Professor Alexander researched, drafted, and edited a health law book, <u>Questions and Answers:</u> <u>Health Law</u>, during her Fall 2023 sabbatical. The co-authored book entails 25 chapters providing a comprehensive health law resource published by Carolina Academic Press. By filling a significant need for studying and teaching materials that test application of health law principles, the book will enhance student learning, assist effective formative assessment, and drive excellence. Professor Alexander also created several new generative AI legal drafting class activities for Intellectual Property, worked on the syllabus for a new public health law course, and researched a new law review article.

Feldman, Stephen

Fall 2023 Sabbatical Leave

Professor Feldman researched and wrote two related article manuscripts: Who Belongs? "We the People" in the Twenty-First Century, and The Roberts Court and the Meaning of 1937: Individual Rights, Democracy, and Minority Rule. These manuscripts analyze and place in a historical context the dramatic changes in constitutional law that the current Supreme Court is implementing. Professor Feldman plans to publish these manuscripts in Law Reviews and then use them as part of a book project, tentatively titled (also) as Who Belongs? "We the People" in the Twenty-First Century.

Robison, Jason

Spring 2024 Sabbatical Leave

Professor Robison invested his sabbatical leave during spring term 2024 into three research projects, all of which have been accepted for publication—namely, (1) revisions to his nearly 800-page legal treatise, *Law of Water Rights & Resources* (Thomson Reuters, 2024) (link); (2) a new journal article about Colorado River Basin tribes and their water rights, *Relational River:* Arizona v. Navajo Nation & the Colorado, 72 UCLA L. Rev. ____ (forthcoming 2025) (link); and (3) a new journal article about Yellowstone River Basin tribes and their water rights, *Equity Along the Yellowstone*, 96 Colo. L. Rev. ____ (forthcoming 2025) (link). Building on a body of scholarship that Professor Robison has completed over the past decade at UW, these projects will enhance his abilities to teach Water Law & Policy and Advanced Water Law & Policy at the College of Law, as well as to fulfill service obligations on the Northern Arapaho Endowment selection committee, the Water & Tribes Initiative leadership team, and the Colorado River Research Group.

Haub School of Environment and Natural Resources

Monteith, Kevin

Spring 2024 Sabbatical Leave

Through his sabbatical activities, Professor Monteith collaborated with his team and established tangible products that reinforce the importance of long-term and individual-based research and highlight the value that the University of Wyoming provides to wildlife management and the field of ecology across the state, intermountain west, and world. Their long-term research revealed heretofore unappreciated aspects of the ecology of large mammals and implications for their conservation, including the consequences of sociality for range capacity in mountain sheep (Rankins et al. 2024, *Frontiers in Ecology and Evolution*), the energetic consequences of mounting an immune response to the pathogens associated with the pneumonia complex in bighorn sheep (Smiley et al. 2024, *Proceedings of the Royal Society of London B*), and the cross generational consequences of severe winters that emanate from carryover of summer nutrition for mule deer (Rafferty et al. In revision, *Landscape Ecology*). They also worked to reinvigorate relationships among stakeholders and partners and established new sources of funding while writing proposals in response to new and exciting findings associated with the thermal ecology of a heat-sensitive species (the moose).

AGENDA ITEM TITLE: <u>Discrimination and Harassment, Mandatory Reporting, and Bystander Intervention Training</u>, Osborn



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- 14th Amendment
- Titles II, VI, VII, IX
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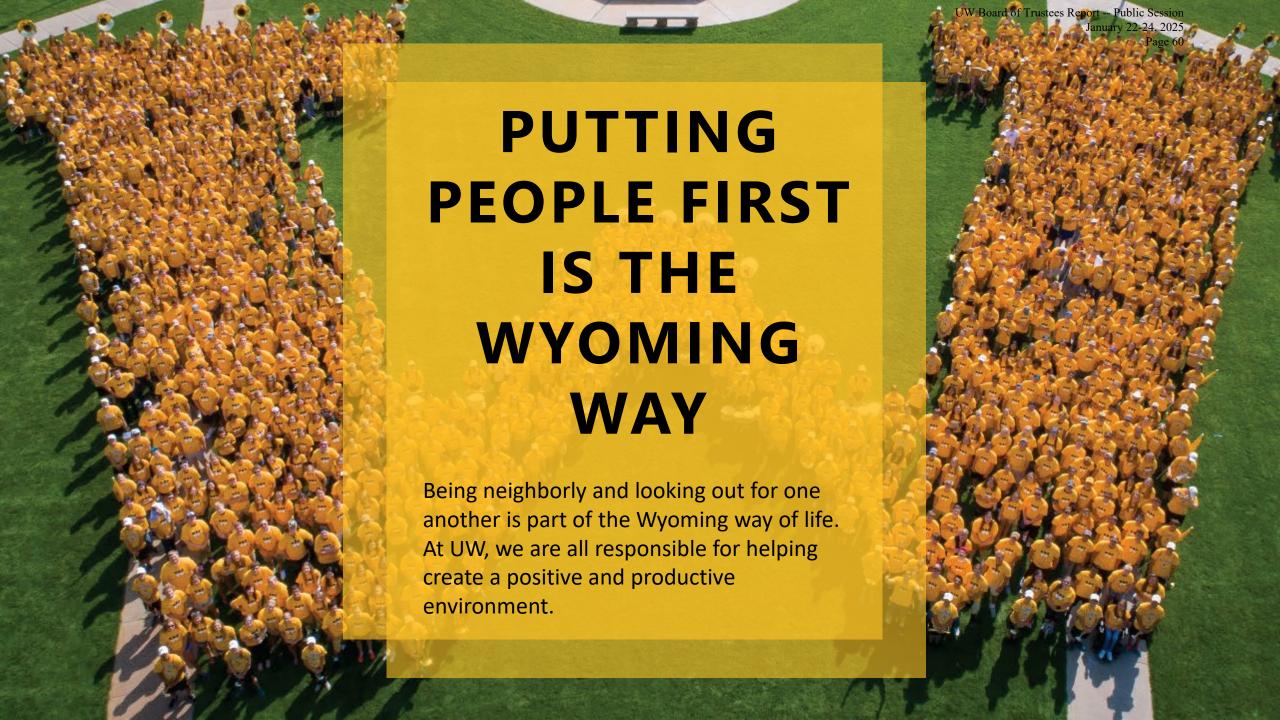
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AGENDA ITEM TITLE: <u>Indigenizing Water Federalism: Native Nations & Western Compacts</u>-Jason Robison

Indigenizing Water Federalism: Native Nations & Western Compacts



Source: Museum of the Rockies

Milk River, MT

WYOMING'S BIG HORN GENERAL STREAM ADJUDICATION

Jason A. Robison*

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I. INTRODUCTION

"The seat may be warm now, Mr. Master, but the chair in which you sit is truly the hot seat. . . . The stakes in this case are very, very high."1 Special Master and former Wyoming Congressman Teno Roncalio was the recipient of this message. It came from Wyoming Attorney General John Troughton on January 26, 1981. The setting was Judge Ewing Kerr's courtroom in Cheyenne, Wyoming. It was the first day of a sixteen-month trial over a matter that, more than any other, would distinguish a general stream adjudication that had been initiated by the State of Wyoming four years prior and ultimately would span the next four decades-an adjudication of water rights in the Wind-Big Horn Basin (colloquially, the "Big Horn adjudication"). The issue at hand concerned the existence, nature, and scope of a water right held by the Eastern Shoshone and Northern Arapaho tribes on Wyoming's sole Indian reservation, the Wind River Reservation, under the Second Treaty of Fort Bridger (1868). Counsel for the United States, Regina Slater, could not have agreed more fully with the attorney general's assessment of the height of the stakes and the temperature of the special master's seat. "Your Honor, this morning begins what the United States regards as probably one of the most important cases that has ever occurred in the history of the United States in relation to the Shoshone and Arapahoe Tribes and the Wind River Indian Reservation," Ms. Slater explained. "This case . . . will resolve, hopefully, the rights of the Tribes to the water that is necessary for them to continue as a viable community of people in the area which has been their home since well before the history books record the Treaty of 1868."2 Attorney General Troughton did not dispute this remark or dismiss it offhand. He acknowledged that the tribes had been "given hope by the federal government in 1868 . . . that under the Winters Doctrine sufficient water for the purposes of the reservation

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^{*} Assistant Professor, University of Wyoming College of Law. S.J.D., Harvard Law School (2013); LL.M., Harvard Law School (2009) (waived); J.D., University of Oregon School of Law (2006); B.S., Environmental Studies, University of Utah (2003). My deepest thanks go to the members of the steering committee that organized the University of Wyoming's Big Horn symposium from which this article extends: Gary Collins, Deb Donahue, Mitch Cottenoit, Sam Kalen, Ramsey Kropf, Larry MacDonnell, Anne MacKinnon, Nancy McCann, and Sara Robinson. I am extremely grateful to Ramsey Kropf (former Big Horn Special Master), Larry MacDonnell, Nancy McCann, and John Thorson for providing extensive feedback on earlier drafts of this piece. I also greatly appreciate the diligent efforts of the editors of Wyoming Law Review and my research assistant, Tyler O'Dell, a third-year student at the University of Wyoming College of Law. Funding for this article was generously provided from the George Hopper Faculty Research Fund. Any errors or omissions are solely my own.

¹ Trial Transcript 50 (January 26, 1981), available at http://bhrac.washakiecounty.net/DocumentCenter/BHCR/O5W4SS0000.pdf [hereinafter Trial Transcript].

² Id. at 37.

INDIGENOUS WATER JUSTICE

by

Jason Robison, Barbara Cosens, Sue Jackson,

Kelsey Leonard, & Daniel McCool

Associate Professor, University of Wyoming, College of Law. S.J.D., Harvard Law School (2013); LLM., Harvard Law School (2009); J.D., University of Oregon School of Law (2006): BS. Environmental Studies, University of Univ. (2003). The authors dedicate this Article to our indigenous colleagues who participated in the Indigenous Water Justice Symposium: Judith Antell, Autumn Bernhard, Daniel Gordalis, Forrest Cach, Howard Dennis, Phil Duncan, John Echohawk, Torivio Fodder, Fred Hooper, Paul Lumley, Nora McDowell, D.R. Michel, John Sirois, Marilyn Tewa, James Trosper, Daryl Viggli, Jeanette Wolfley, and Rene Woods. We are inspired by and grateful to you. We also greatly appreciate feedback offered by numerous colleagues on drafts presented at the Rocky Mountain Mineral Law Foundation's Eighteenth Institute for Natural Resources Law Teachers, the Waterkeeper Alliance's 2017 Annual Conference, and the University of Wyoming College of Law's Junior Scholars Forum. Funding for the Article was graciously provided by the Carl M. Williams Faculty Research Fund. Any errors or omissions are

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Professor, Australian Rivers Institute, Griffith University, Honorary Fellow, School of Geography, University of Melbourne. Ph.D., Geography, Macquarie University (1998); R.Sc., Economic Geography, University of New South Wales (1988)

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INTRODUCTION

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Indigenous Peoples are struggling for water justice across the globe. These struggles stem from centuries-long, ongoing colonial legacies and hold profound significance for Indigenous Peoples' socioeconomic development, cultural identity, and political autonomy and external relations within nation-states. Ultimately, Indigenous Peoples' right to selfdetermination is implicated. Growing out of a symposium hosted by the University of Colorado Law School and the Native American Rights Fund in June 2016, this Article expounds the concept of "indigenous water justice" and advocates for its realization in three major transboundary river basins: the Colorado (U.S./Mexico), Columbia (Canada/U.S.), and Murray-Darling (Australia). The Article begins with a novel conceptualization of indigenous water justice rooted in the historic United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)-specifically, UNDRIP's foundational principle of selfdetermination. In turn, the Article offers overviews of the basins and narrative accounts of enduring water-justice struggles experienced by Indigenous Peoples therein. Finally, the Article synthesizes commonalities evident from the indigenous water-justice struggles by introducing and deconstructing the concept of "water colonialism." Against this backdrop, the Article revisits UNDRIP to articulate principles and prescriptions aimed at prospectively realizing indigenous water justice in the basins and around the world.

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INTRODUCTION

"The world is watching what is happening[.]" "If the [U.S.] chooses not to act in response to the alarming actions being manifested in North Dakota, their rhetoric within the halls of the [U.N. is] nothing more than empty, meaningless promises." Members of the U.N. Permanent Forum on Indigenous Issues expressed these sentiments late 2016. The alarming, closely watched actions concerned the controversial Dakota Access Pipeline (DAPL)." As for the empty, meaningless promises, they implicated a host of domestic and international human rights instruments, but in no small measure the historic United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)." As articulated by the Permanent Forum, the United States and its political subdivisions had transgressed UNDRIP repeatedly in their dealings with the people of the Great Sioux Nation over DAPL." The Mni Sox (Missouri) River's sacred, sustaining waters—stored in Lake Oahe—were a central (albeit not ex-

¹ Press Release, Mr. Alvaro Pop Ac, Chair of the U.N. Permanent Forum on Indigenous Issues, Indigenous Issues on the Protests of the Dakota Access Pipeline, United Nations Permanent Forum on Indigenous Issues (Aug. 25, 2016).

³ Report and Statement from Chief Edward John, Expert Member of the U.N. Permanent Forum on Indigenous Issues, Firsthand Observations of Conditions Surrounding the Dakota Access Pipeline 6 (Nov. 1, 2016).

See generally Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers, 255 F. Supp. 3d 101, 114 (D.D.C. 2017) (discussing federal litigation and associated controversies).

⁴ See, e.g., Report and Statement from Chief Edward John, supra note 2, at 6 (referencing U.S. Bill of Rights and International Covenant on Civil and Political Districts)

⁵ Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295, U.N. Doc A/RES/61/295 (Sept. 13, 2007) [hereinafter UNDRIP].

^{*} Press Release, Mr. Alvaro Pop Ac, supra note 1; Report and Statement from Chief Edward John, supra note 2, at 7.

VISION & PLACE

JOHN WESLEY POWELL & REIMAGINING
THE COLORADO RIVER BASIN



EDITED BY

JASON ROBISON | DANIEL McCOOL | THOMAS MINCKLEY

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CORNERSTONE AT THE CONFLUENCE

Navigating the Colorado River Compact's Next Century



Edited by

JASON ANTHONY ROBISON

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RELATIONAL RIVER: ARIZONA V. NAVAJO NATION & THE COLORADO

Jason Anthony Robison1

It is not every day the U.S. Supreme Court adjudicates a case about the water needs and rights of one of the Colorado River Basin's thirty tribal sovereigns and the trust relationship shared by that sovereign with the United States. Yet just that happened in Arizona v. Navajo Nation in June 2023. As explored in this Article, the Colorado is a relational river relied upon by roughly forty-million people, reeling from climate change for nearly a quarter century, and subject to management rules expiring and requiring extensive, politically charged renegotiation by 2027. Along this relational river, Arizona v. Navajo Nation was a milestone, illuminating water colonialism and environmental injustice on the country's largest Indian reservation, and posing pressing questions about what exactly the trust relationship entails vis-à-vis the essence of life. Placing Arizona v. Navajo Nation in historical context, the Article synthesizes the case with an eve towards the future. Moving forward along the relational river, the trust relationship should be understood and honored for what it is, a sovereign trust, and fulfilled within the policy sphere through a host of measures tied, directly and indirectly, to the post-2026 management rules. Further, if judicial enforcement of the trust relationship is necessary, tribal sovereigns in the basin (and elsewhere) should not view the Court's 5-4 decision as the death knell for water-related breach of trust claims, but rather as a guide for bringing cognizable future claims and reorienting breach of trust analysis.

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¹ Carl M. Williams Professor of Law and Social Responsibility, University of Wyoming College of Law; Adjunct Professor, University of Wyoming Haub School of Environment and Natural Resources; Leadership Team, Water & Tribes Initiative in the Colorado River Basin; Member, Colorado River Research Group. S.J.D., Harvard Law School, 2013; LL.M., Harvard Law School, 2009; J.D., University of Oregon School of Law, 2006; B.S., Environmental Studies, University of Utah, 2003. As elaborated in the Conclusion, this Article is dedicated to Charles Wilkinson, someone who changed hearts and minds across western North America and beyond, and who passed on roughly two weeks before the U.S. Supreme Court decided Arizona v. Navajo Nation. I have incurred many debts while preparing the Article. It originated from an invitation from Dylan Hedden-Nicely to submit an Arizona v. Navajo Nation amicus brief drafted by Larry MacDonnell (lead author), Robert Adler, Burke Griggs, Dan Luecke, and myself. Following the brief's submission, several colleagues kindly provided input on and opportunities to present earlier versions of the Article, including Brenda Bowen, Affie Ellis, John Fleck, Kristi Hansen, Ginger Paige, Sharon Wilkinson, and Jennifer Watt. Many thanks to all. Any errors are mine alone.

Jason Anthony Robison¹

As one of three major rivers with headwaters in the sublime Greater Yellowstone Ecosystem, the Yellowstone and its tributaries are subject to an interstate compact (aka "domestic water treaty") litigated from 2007 to 2018 in the U.S. Supreme Court in Montana v. Wyoming. While four tribal nations exist within the 71,000 square-mile Yellowstone River Basin-the Eastern Shoshone and Northern Arapaho in Wyoming and the Crow and Northern Cheyenne in Montana-the Yellowstone River Compact ratified in 1951, approximately a decade before the self-determination era of federal Indian policy had begun, neither affords these tribal sovereigns representation on the Yellowstone River Compact Commission nor clearly addresses the status of their water rights within (or outside) the compact's apportionment. Such marginalization is systemic across Western water compacts. Devised as alternatives to original actions for equitable apportionment before the U.S. Supreme Court, this Article focuses on the Yellowstone River Compact and its stated purpose of "equitable division and apportionment," reconsidering the meaning of "equity." procedurally and substantively, from a present-day perspective more than a half century into the self-determination era. "Equity" is a pervasive, venerable norm for transboundary water law and policy (interstate compacts and otherwise) contends the Article, and "equity" indeed should be realized along the Yellowstone in coming years, both by including the basin tribes alongside their federal and state co-sovereigns on the Yellowstone River Compact Commission, as well as by clarifying the status of and protecting the basin tribes' water rights under the compact's apportionment.

UW Board of Trustees Report -- Public Session

January 22-24, 2025

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Carl M. Williams Professor of Law and Social Responsibility, University of Wyoming College of Law; Adjunct Professor, University of Wyoming Haub School of Environment and Natural Resources; Leadership Team, Water & Tribes Initiative; Member, Colorado River Research Group. S.J.D., Harvard Law School, 2013; LL.M., Harvard Law School, 2009; J.D., University of Oregon School of Law, 2006; B.S., Environmental Studies, University of Utah, 2003. My work on this Article began as Montana v. Wyoming was drawing to a close in the U.S. Supreme Court in 2018, and the piece has evolved continuously since then, stemming largely from invitations to present drafts at Columbia Law School's Sabin Colloquium on Innovative Environmental Law Scholarship in 2018, as the University of Utah S.J. Quinney College of Law's Stegner Young Scholar in 2019, and at the 2021 conference of the Public Land & Resources Law Review at the University of Montana's Alexander Blewett III School of Law. I wish to express my heartfelt gratitude for each opportunity. In particular, at the Sabin Colloquium, I had the incredibly good fortune of having the former Special Master in Montana v. Wyoming, Professor Barton (Buzz) Thompson from Stanford Law School, as my reviewer, for which I am deeply grateful. In addition, I have benefitted from input and encouragement from Katie Fischer Kuh, Michael Gerrard, Yael Lifshitz, Larry MacDonnell, Anthony Moffa, Sharmila Murthy, Kate Owens, Gabe Pacyniak, Robert Percival, Bryan Shuman, William Scott, John Thorson, James Trosper, Shelly Welton, and Alyson White Eagle. Many thanks to each of you. All advocacy in this Article should be attributed solely to me as an individual, not to the Yellowstone River Basin's tribal nations: Crow, Eastern Shoshone, Northern Arapaho, and Northern Cheyenne. Any errors are also mine alone.

Overview

- Compact Clause ala Frankfurter & Landis
- Water Compacts Across Space & Time
- Toward Water Co-Sovereignty

Compact Clause ala Frankfurter & Landis



CONSTITUTION of the United States



Article. I.

SECTION, 10

No State shall enter into any Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts; pass any Bill of Attainder, ex post facto Law, or Law impairing the Obligation of Contracts, or grant any Title of Nobility.

No State shall, without the Consent of the Congress, lay any Imposts or Duties on Imports or Exports, except what may be absolutely necessary for executing it's inspection Laws: and the net Produce of all Duties and Imposts, laid by any State on Imports or Exports, shall be for the Use of the Treasury of the United States; and all such Laws shall be subject to the Revision and Controul of the Congress.

No State shall, without the Consent of Congress, lay any Duty of Tonnage, keep Troops, or Ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of delay.

YALE LAW JOURNAL

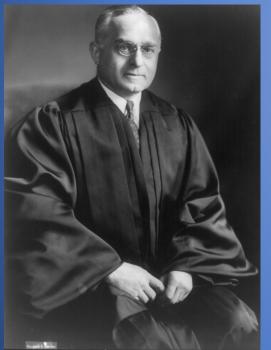
Vol. XXXIV

MAY, 1925

No. 7

THE COMPACT CLAUSE OF THE CONSTITUTION—A STUDY IN INTERSTATE ADJUSTMENTS

FELIX FRANKFURTER and JAMES M. LANDIS



"We are dealing with regions, like the Southwest clustering about the Colorado River, . . . which are organic units in the light of a common human need like water-supply. The regions are less than the nation and are greater than any one State. The mechanism of legislation must therefore be greater than that at the disposal of a single State. National action is the ready alternative. But national action is either unavailable or excessive. . . . Collective legislative action through the instrumentality of compact by States constituting a region furnishes the answer."



Dean James M. Landis Source: Harvard Law School

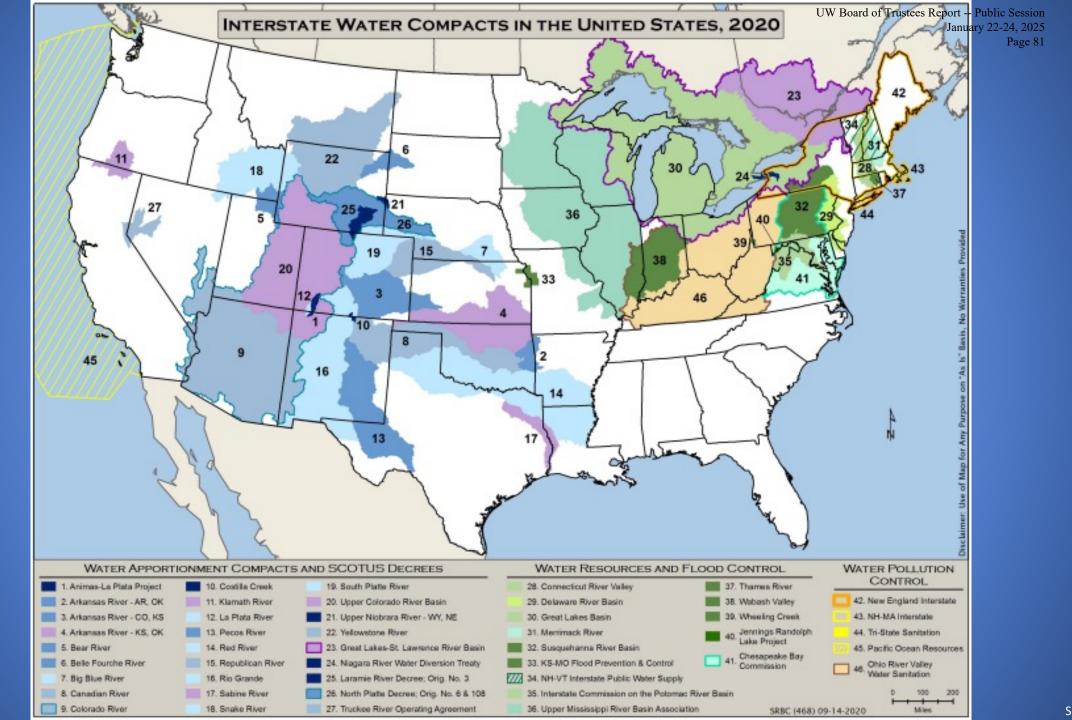
Justice Felix Frankfurter
Source: Association for Jewish Studies

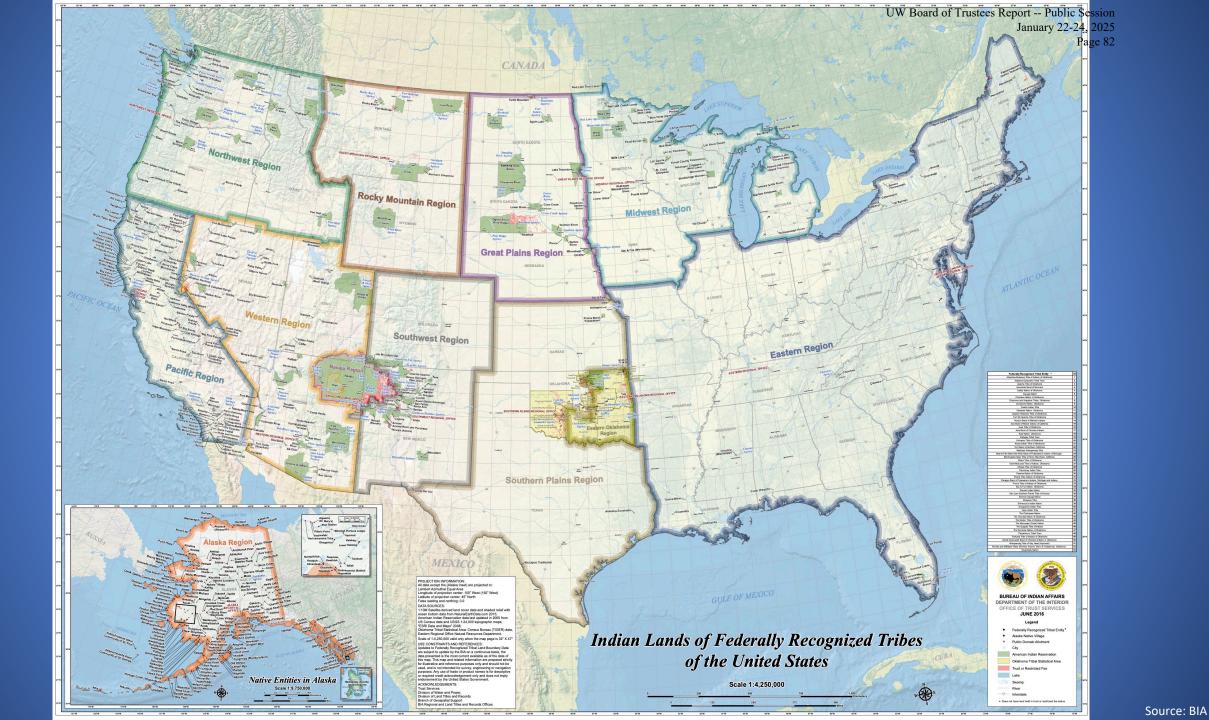


Source: CSU Colorado Commissioner Delph Carpenter

"If the separate sovereignties (the States) in Union only for Federal purposes have and do possess and exercise the powers to formulate and conclude binding conventions between each other and between one or more thereof and the Federal Government respecting boundaries, fisheries, harbor control and pollution, interstate easements and servitudes, and like subjects, there can be no logical objection to the application of like methods of solution to all problems growing out of the use and distribution of the waters of interstate streams."

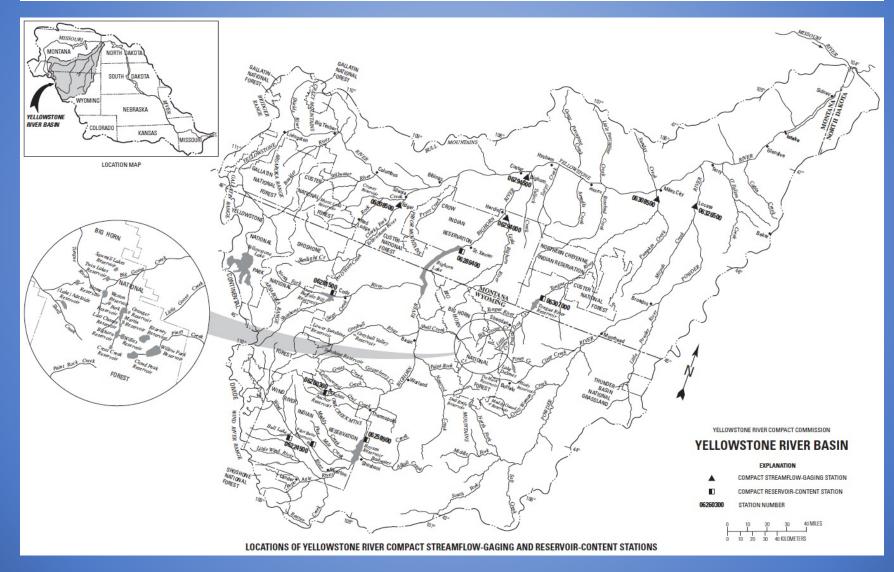
Water Compacts Across Space & Time





Federal Indian Policy Era Compact		of Trustees Report Public Session January 22-24, 2025 Page 83
Allotment and Assimilation (1871-1928)	La Plata River Compact (1925)	
Indian Reorganization (1928-1942)	 Colorado River Compact (1928) Rio Grande Compact (1939) 	
Termination (1943-1961)	 Pecos River Compact (1949) Upper Colorado River Basin Compact (1949) Snake River Compact (1950) Yellowstone River Compact (1951) Canadian River Compact (1952) Sabine River Compact (1954/1962) Klamath River Basin Compact (1957) Bear River Compact (1958/1980) 	
Self-Determination (1961-Present)	 Arkansas River Basin Compact, Kansas and Oklahoma, (1966) Animas-La Plata Project (1968) Arkansas River Basin Compact, Arkansas and Oklahoma, (1973) Red River Compact (1980) Goose Lake Basin Compact (1984) 	

YELLOWSTONE RIVER COMPACT, 1950



YELLOWSTONE RIVER COMPACT, 1950

ARTICLE III

A. It is considered that no Commission or administrative body is necessary to administer this Compact or divide the waters of the Yellowstone River Basin as between the States of Montana and North Dakota. The provisions of this Compact, as between the States of Wyoming and Montana, shall be administered by a Commission composed of one representative from the State of Wyoming and one representative from the State of Montana, to be selected by the Governors of said States as such States may choose, and one representative selected by the Director of the United States Geological Survey or whatever Federal agency may succeed to the functions and duties of that agency, to be appointed by him at the request of the States to sit with the Commission and who shall, when present, act as Chairman of the Commission without vote, except as herein provided.

ARTICLE VI

Nothing contained in this Compact shall be so construed or interpreted as to affect adversely any rights to the use of the waters of Yellowstone River and its tributaries owned by or for Indians, Indian tribes, and their reservations.

Toward Water Co-Sovereignty

INDIGENOUS WATER JUSTICE

Jason Robison, Barbara Cosens, Sue Jackson, Kelsey Leonard, & Daniel McCool

2. Political Partnership

With respect to procedural and participatory principles of indigenous water justice, a basic statement rooted in UNDRIP summarizes: Indigenous Peoples should be capacitated and possess a seat at the table in regard to water governance. As detailed earlier, UNDRIP recognizes Indigenous Peoples' right to autonomy over water-related internal matters-"as well as ways and means for financing their autonomous functions"-and likewise obligates nation-states to establish and implement assistance programs for Indigenous Peoples for water-related conservation and environmental protection. 477 UNDRIP also articulates Indigenous Peoples' broad participatory rights and nation-states' obligations pertaining to consultation, cooperation, and free, prior, and informed consent. These obligations adhere to water projects and water-related "legislative or administrative measures" that may affect Indigenous Peoples. 479 Political partnership is a foundational concept reflected in these provisions. Indigenous Peoples should be regarded as partners within the broader political systems of nation-states like Australia, Canada, and the United States. Our non-exhaustive prescriptions below reflect this relationship.



United Nations

EQUITY ALONG THE YELLOWSTONE

Jason Anthony Robison¹

"[E]quity is a synonym for fairness. When thinking about the fairness of transboundary water institutions such as interstate compacts, one logical focus is the substance of an apportionment. For example, which types of parties are allocated water, what is the order of priority during shortages, how secure are different types of water rights, and so forth? These questions capture what is referred to as 'substantive equity.' . . . In addition, a complementary angle for evaluating the fairness of transboundary water institutions is to consider the composition and processes of their governance structures. For example, which parties have a voice in decision-making and which do not, how transparent are decision-making processes, how effective is the particular structure in actually enabling governance, and so on? These related questions reflect the essence of what has been called 'procedural equity.'"

EQUITY ALONG THE YELLOWSTONE

Jason Anthony Robison¹

"Looking more closely at procedural equity, if the Yellowstone River Compact truly aims to bring about 'equitable division and apportionment' along the river system here in the self-determination era, the current treatment of basin tribes under the compact's governance structure needs to be reconsidered. More specifically, the Yellowstone River Compact Commission's composition and processes should be updated to acknowledge the Crow, Eastern Shoshone, Northern Arapaho, and Northern Cheyenne for what they are—tribal sovereigns—and to include them in governance alongside their co-sovereigns, the basin states and the United States, if that is something each respective tribe would be interested in."

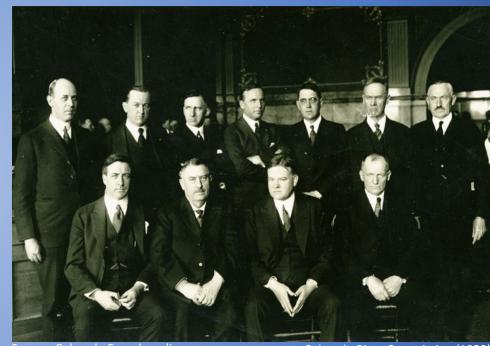
Indigenizing Water Governance

Composition Issues

- Indirect Federal Representation
- Tribal Eligibility for Representation
- Scope of Tribal Representation

Procedural Issues

- Compact Amendment vs. Renegotiation
- Superseding Statutory Law
- Substatutory Options: MOUs, Rules, etc.



Source: Colorado Encyclopedia

Colorado River Commission (1922)



AGENDA ITEM TITLE: Presentation and Update: School of Computing, Turpen, Allen

University of Wyoming School of Computing Implementation Update

Board of Trustees
Gabrielle Allen, Director
January 22, 2025





Timeline for SoC Rollout

Year 0	Spring 2022	BoT approves SoC and five-year plan, including incubation in CEPS and migration to a standalone unit under AA. Appoint Director, hire staff.
Year 1	AY2022-2023	1 st faculty/research scientist (RS) searches, faculty affiliates (merge of WyGISC) Build partnerships with community colleges, corporations, national labs
Year 2	AY2023-2024	1 st faculty/RS cohort, curricula committee, develop courses, launch minor 2 nd faculty/RS searches, develop undergrad programs (add CDSE and ASD w/ CC)
Year 3	AY2024-2025	2 nd faculty/RS cohort, program development (MS AI and QISE, BA/BS) 3 rd faculty/RS searches, teach courses, develop courses, recruit SoC majors
Year 4	AY2025-2026	3 rd faculty/RS cohort, enroll 1st SoC BS class, other UW programs/minors 4 th faculty/RS searches, program development (PhD and Post-Bacc)
Year 5	AY2026-2027	4 th faculty/RS cohort Evaluate/modify programs.

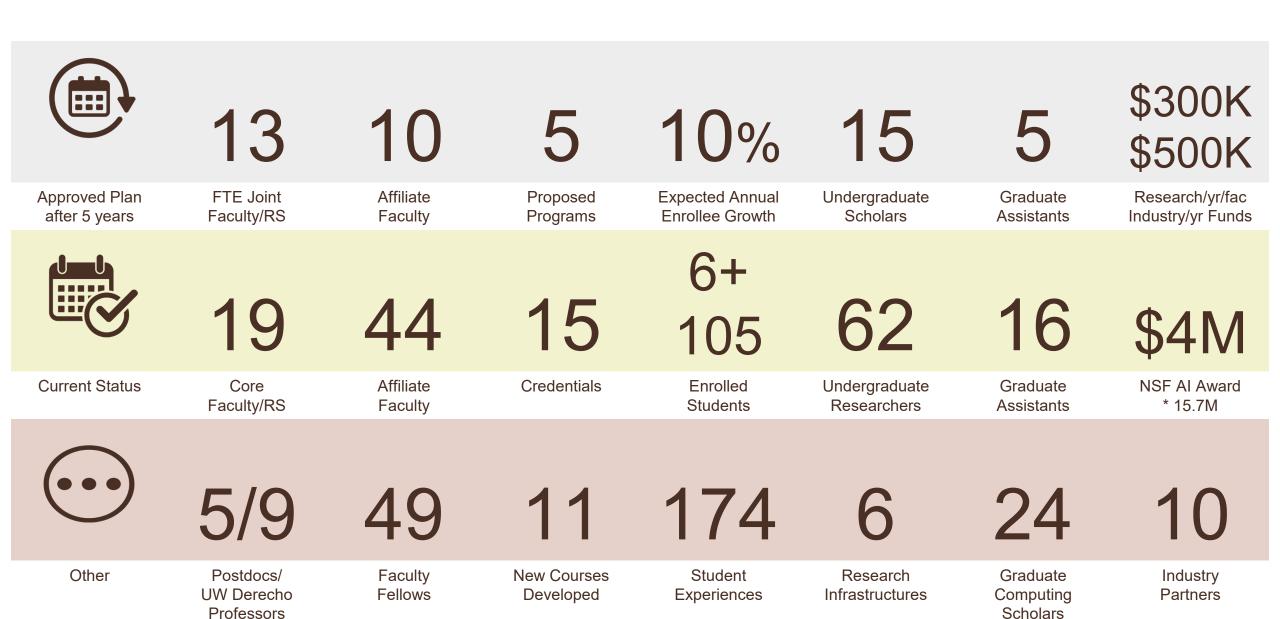
Budget

Year	WIP	Academic Affairs	BoT Special Reserves (Startup)	Additional /Tier 1	Total	Renovations
FY 2022	<\$1,150,000*				\$1,150,000	
FY 2023		\$1,866,400	\$600,000	\$500,000	\$2,966,400	\$250,000
FY 2024		\$2,200,000		\$500,000	\$2,700,000	\$236,000
FY 2025		\$2,721,517	\$1,107,900	\$500,000	\$4,329,417	\$335,110
FY 2026 (Est)		\$2,721,517		\$500,000	\$3,221,517	

Longer Term Sustainability and Growth

- Student tuition: teaching faculty
- External research and development funding: research scientists, computing professionals, postdocs, graduate student and undergraduate research
- Endowments and fundraising: student scholarships, research scientists, endowed faculty, building

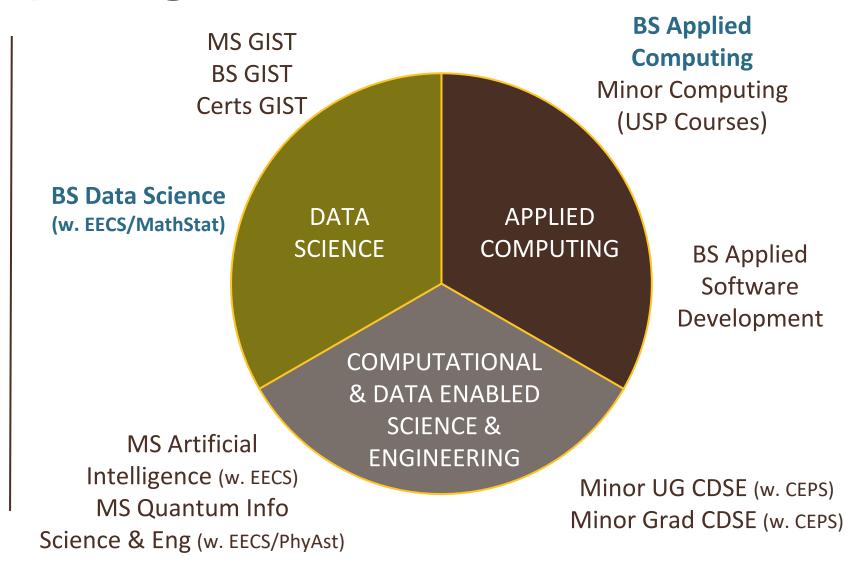
SoC Metrics Dashboard



Expanding Computing Across UW

Add To Existing Options:

- Blockchain Minor
- Data Analytics Minor
- Computer Engineering, B.S.
- Computer Science, B.S. (Big Data & Business Concentrations)
- Computer Engineering Minor
- Computer Science Graduate Minor
- Computer Science Minor
- Computer Science, M.S.
- Computer Science, Ph.D.
- Cybersecurity Certificate
- Secondary Computer Science Endorsement





Enrolled Students

On schedule

- BS Applied Computing, Fall'25
- Minor Computing, Fall'23
- New courses (11 new/17 dev)

Additional to plan

- BS ASD (Fall'24)
- BS Data Science (Fall'25)
- BS GIST (Fall'23)
- 2 MS Degrees with EECS/Phys
- Admin for CDSE minors
- Crosswalk of UW computing courses

Elements for consideration

- Experiential learning
- Transfer pathways
- Online options
- Ready for USP Digital Literacy

UW Board of Trustees Report Public Session				
UNDERGRADUATE/GRADUATE DEGREE PROGRAM	AY 23-24 ^{ry 22}	2-24, A% 24-25 Page 98		
Minor Computing	0	2		
Minor Interdisciplinary Computational Science-UG	0	1		
BS Applied Software Development	-	2		
BS Geospatial Information Science and Technology	0	7		
BS Applied Computing	-	-		
BS Data Science (with EECS/MathStats)	-	-		
Certificate in GIS-Undergraduate	29	38		
Certificate in Remote Sensing- Undergraduate	10	12		
UNDERGRADUATE DEGREE PROGRAMS TOTAL	39	62		
Minor Interdisciplinary Computational Science-Graduate	1	2		
MS in GIST	19	21		
MS AI (with EECS)	-	2		
MS QISE (with EECS/Physics)	-	0		
Certificate in GIS-Graduate	13	15		
Certificate in Remote Sensing- Graduate	1	5		
Certificate in UAS-Graduate	2	4		
GRADUATE DEGREE PROGRAMS TOTAL	36	49		
TOTAL SOC PROGRAMS STUDENT ENROLLMENT	75	111		

Computing Opportunities for all UW Students



Student Focused SoC Initiatives

- Graduate Assistantships
- Graduate Computing Scholars
- SoC Undergrad Research Experiences (SURE)
- AmericaView Research Experiences
- Faculty Fellow Awards

174

36

Students Impacted

Academic Units

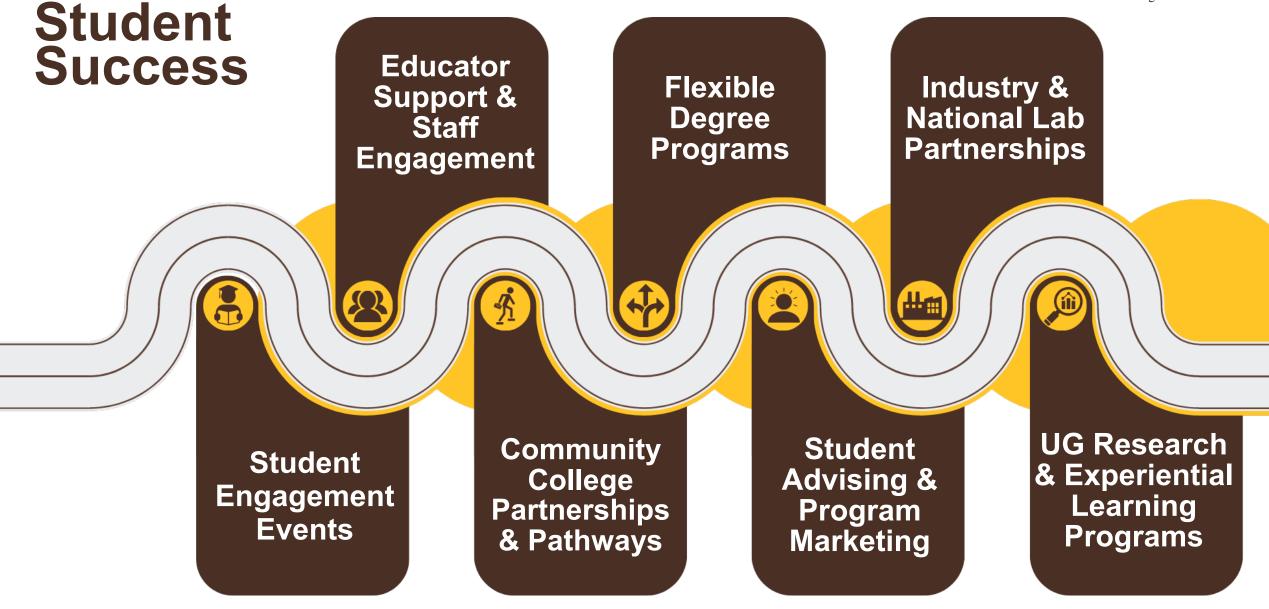
48%

52%

Female

Male



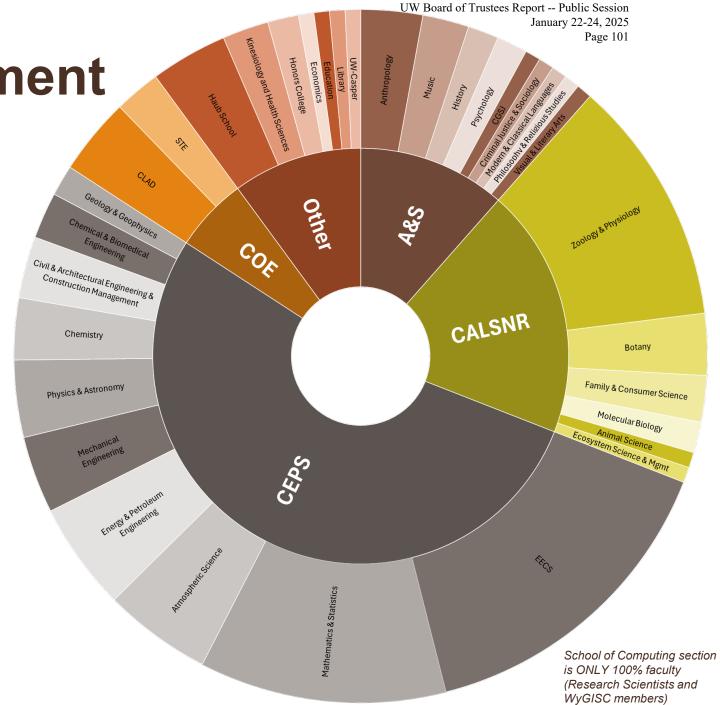


UW Faculty Engagement

160+ Engagements

98 Unique Faculty

34 Departments



Faculty: Adjuncts, Fellows, UW Derecho Professors, Advisory Board, Student Mentors, Course Guest Lectures

Part of a National Movement

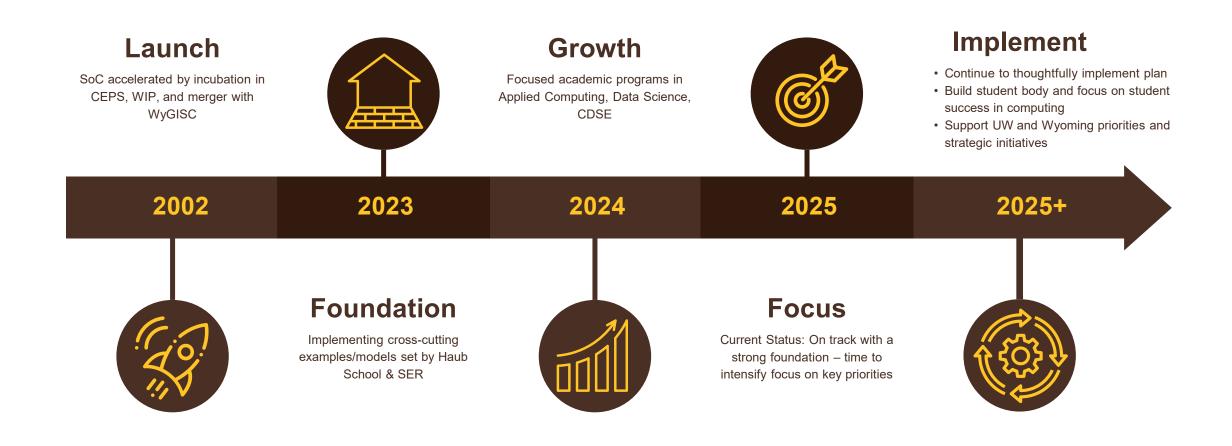
toward increased interdisciplinary computing

- SoCs are growing in number to meet rising student demand for interdisciplinary computing skills, careers in data-driven fields and opportunities in globally competitive markets.
- As a member of the Computing Research Association (CRA), UW joined 149 other member academic units in showcasing their computing efforts.
 - QR code: Page 157 of CRA member directory



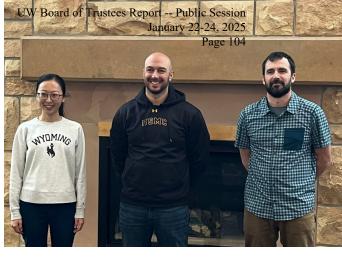


Moving Forward

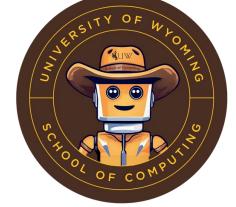








Thank You











AGENDA ITEM TITLE: Research and Economic Development Division Annual Report, Chitnis

UW Board of Trustees Report -- Public Session January 22-24, 2025

Research and Economic Development Division







FY2024 Annual Report

Wyoming Relevant
Nationally Competitive
Globally Preeminent

Table of Contents

1 .	Accomplishments	
	REDD Highlights: Expanding Knowledge Enterprise	
	REDD Highlights: Enhancing State-wide Engagement	
	REDD Highlights: Fostering Innovation	
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6.	Service and Resource Units for the campus and the state	19
7.	Appendix: UW's Innovation and Economic Prosperity Designation Application	25

UW's knowledge enterprise and innovation capabilities have bright days ahead in FY2025 and beyond. The Research and Economic Development Division is catalyzing this transformation through newly established or reimagined units and strategically investing in topics relevant to Wyoming's needs and growth.

1. Accomplishments

The Research and Economic Development Division (REDD) of the University of Wyoming catalyzes expansion of UW's knowledge enterprise (research, service, and innovation), provides experiential learning opportunities for UW students, and fosters research excellence while driving innovation and engagement that supports economic development.

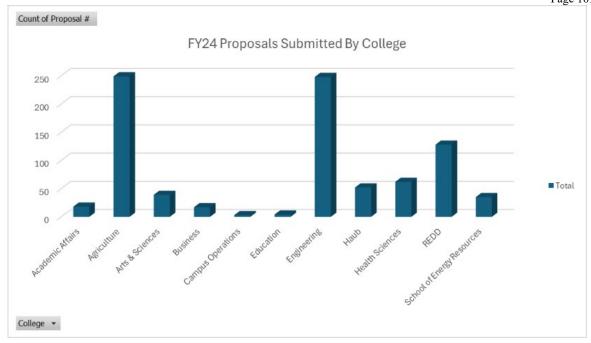
To meet these goals, REDD units function as service organizations (e.g. pre-award services, research compliance, research facilities, research computing resources, etc.), as integrators of multidisciplinary research (university-wide centers and institutes), as catalysts for entrepreneurship and innovation (e.g. Center for Entrepreneurship and Innovation, Technology Transfer Office, etc.), and as technical assistance providers to businesses across the state (e.g. Small Business Development Centers, Manufacturing Works.). These units foster *Wyoming-relevant*, *nationally competitive*, *and globally preeminent* programs of research, innovation, and economic development. Highlights of REDD's activities and accomplishments in 2024 are described in this report.

REDD Mission Goals

Goal 1: Increase the size, breadth, effectiveness, and impact of UW's knowledge enterprise.

- **Research Infrastructure:** REDD continued to support multiuser facilities that will serve the campus' needs for conducting state of the art research.
 - The UW Science Institute continued to refine its pay-for-service offerings through its Center for Advanced Scientific Instrumentation and its sophisticated greenhouses.
 - o COIFPM developed Equipment Use Policy for the campus-wide access to the equipment in the High Bay facility.
 - REDD also assessed effectiveness and financial sustainability of two facilities Ecological
 Biogeochemistry Lab and Ecological Genome Technology Lab. As recommended by the evaluation
 committee, the biogeochemistry lab was closed because of its overlap with existing other facilities.
- Seed funding: REDD provided seed grants for over \$1.5 million directly or through a variety of campus units:
 - Center for Global Studies (\$50,000 total)
 - Wyoming Institute for Humanities Research (\$60,000)
 - o Research Committee of Faculty Senate (\$120,000 to be used in FY2025)
 - Board of Trustees Research Excellence Fund (\$200,000)
 - UW Science Institute (Science Initiative funds \$600,000)
 - UW Institute at the AMK ranch (\$50,000)
 - Vice Provost for Global Engagement (\$100,000 for UW-Cardiff collaborations).

In addition, use-inspired translational research is supported through seed grants from regional (NIH REACH or NSF Innovation Engine) or UW sources (ART grant) ranging from \$15,000 to \$300,000 each.



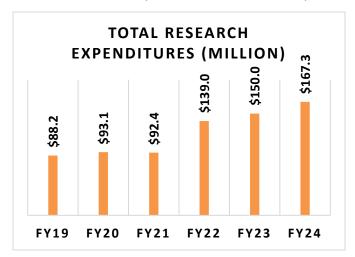
- **Submissions:** To increase opportunities for grant applications, EPSCoR/IDeA and Research Development Office was established to foster grants development activities. The Pre-Award Services Office provided training as well as focused help to faculty while recruiting all posiitons in the unit. As a result, UW submitted 778 proposals in FY2024, reflecting a 38 percent increase over FY2023. Distribution of proposals in different colleges and schools is shown in the figure.
- Receipt of Grants: UW received grants for \$150 million in FY2024 compared to \$120 million in FY2023. These include grants to fund research (67 percent of funds received), instruction (two percent), and public service (31 percent) (including economic development activitites). Majority of these funds (56 percent of total) were obtained from Federal grants. UW continued to demonstrate the breadth of its research activities by receiving grants in all of its colleges and schools (Table 1).

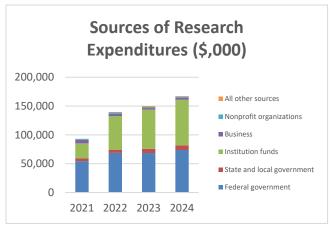
Table 1. New Grants in FY2024 in different colleges and schools

College	Total (\$)	
College of Agriculture, Life Sciences & Natural Resources	37,912,890	
College of Arts & Sciences	5,216,409	
College of Business	2,267,772	
College of Education	203,000	
College of Engineering and Physical Sciences	20,903,147	
College of Health Sciences	11,597,667	
College of Law	10,500	
School of Energy Resources	14,683,928	
Haub School of Environment and Natural Resources	3,577,171	
School of Computing	1,745,611	
REDD Centers, Institutes, and Offices	23,100,854	

The remaining grants were awarded to Academic Affairs and operational units

• Research and Development Expenditures: Every year U.S. colleges and universities report data to NSF about their expenditures-for R&D in the fiscal year. The survey collects information on R&D expenditures by field of research and source of funds and gathers information on types of research, expenses, and headcounts of R&D personnel. The information is useful in many statistical analyses as well as in classification of universities (R1, R2, AAU membership, etc.). UW's total R&D expenditures in FY24 increased to \$167 million, the highest level





so far, reflecting UW's research growth as well as more accurate tracking and reporting. In 2024, approximately 44 percent of these expenditures were obtained through federal grants.

A few important trends and observations can be derived from these data. First, UW continues to increase its extramural as well as institutional funds used for research. Second, UW provides better research environment for its students than the national average based on R and D expenditures per student.

Total R&D Expenditure vs. Total Student Numbers (411 universities)

R^2 = 0.37

y = -65285.55 + 15.7x

1,500,000

Total Student Numbers (Graduate + Undergraduate)

5

Goal 2. Foster economic development by building a vibrant culture of innovation and support at UW, and by providing technical assistance across Wyoming.

- UW is now officially designated as an Innovation and Economic Prosperity (IEP) institution by the Association of Public and Land Grant Universities. This prestigious designation acknowledges public research universities that work with public- and private-sector partners in their respective states and regions to support economic development. A key to success in obtaining this designation was implementing IEP guidelines for self-assessment and planning. This self-study was vital to submission of a compelling IEP application and for UW to identify and focus on priorities that address critical gaps and stakeholder needs. The resulting growth and development plan for UW charts UW's plans for innovation and economic development in the future years (see attached). Such development is performed through a variety of activities, including innovation and entrepreneurship, technology transfer, talent and workforce development, and community development.
- The Office of Industry and Strategic Partnerships (OISP) was established as a joint unit between Research and Economic Development Division and UW Foundation to initiate, establish and enhance engagement with businesses, agencies, private donors, and foundations and is now fully staffed. The office received an EDA University Center program grant aimed to advance access to and referrals between the various services and resources for entrepreneurship, small business, and broader industry, including such resources at UW. Prior to this grant, Wyoming was one of the small number of states without an EDA University Center.
- Coordination and amplification of broader impacts of UW's research activities is a priority for REDD. UW was selected for the 2023 cohort of the Program to Enhance Organizational Research Impact Capacity (ORIC), joining seven other distinguished universities. This initiative is led by the Center for Advancing Research Impact in Society (ARIS). UW team successfully completed this year-long training and developed plans for coordinating and further developing UW's research impacts activities across the campus. In FY2025, EPSCoR/IDeA and Research Development Office will be responsible for implementing the plan.
- A functional and proactive technology transfer office is essential for any research university to increase IP portfolio and revenue generation through commercialization of its IP. The new Deputy Vice President of Research and Innovation has cleared the backlog and implemented streamlined, efficient and productive processes. A \$6 million grant from NSF's Accelerating Research Translation (ART) program established because of the CHIPS and Science Act of 2022.
- The CHIPS and Science Act of 2022 created new opportunities for spurring geographically distributed innovation hubs. To prepare for these new programs, UW formed a faculty committee that made recommendations for reducing barriers and providing incentives for UW faculty to apply for these opportunities. UW has strategically partnered with institutions in other states for applying for these programs.
 - O UW is co-PI in the NSF Innovation Engine on Climate Resiliency that covers CO and WY (total funding \$160 million over 10 years). This project was one of the ten innovation engines funded. Of the first years' \$7.5 million budget of the project, UW has received financial support through a variety of means: institutional administrative support (for TTO and HPAIRI), software development grant to SoC, one use-inspired research grant to CEPS and an innovation grant to a startup founded by UW alumni.
 - UW is a participant on another Innovation Engine grant application on quantum information sciences and engineering. The application is led by the University of New Mexico and is currently under review.
 - UW is leading Wyoming's participation in the EDA Tech Hub designated for the nuclear energy industry, with Idaho being the lead/partner state. Various WY agencies and institutions, along with Idaho National Laboratory, ID agencies and institutions of higher education, are coming together in this coalition.

REDD Management Goals for 2024

Goal 1: Staff all units sufficiently and work collaboratively.

In FY2024, REDD focused on building out the infrastructure for support of a growing set of research activities. Incentives were provided for development of new projects, facilitation of collaborations for research, and generation of resources for the building blocks of "Ideas to Impacts" progression seen in premier research universities. The position of Deputy Vice President of Research and Innovation was filled with the appointment of Arundeep Pradhan in June of 2024. This position serves to elevate areas within REDD, such as the Technology Transfer Office, to levels of excellence that will meet and exceed expectations of the university and the State of Wyoming. Additional staff include the permanent hires of directors of EPSCoR/IDEA, the UW Institute at AMK Ranch and the Science Institute. A major focus in FY2024 was to recruit all staff positions in the critical service units. Now we have 90% positions filled in, the focus will be shifted on retention of these staff.

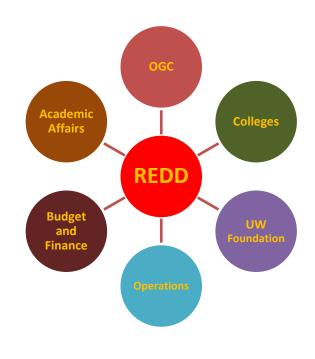
Table 2. Status of staffing levels in different REDD units.

Unit	Total Positions	Filled
70001 – VPRED staff	12	11
70002 - UW AMK Institute	3	3
70005 - TTO	6	2
70007 - MW	7	6
70008 - WYNDD	15	15
70009 - EPSCoR/IDEA Office	8	8
70010 - IMPACT 307	2	2
70013 - UW Science Institute	16	12
70015 - INBRE	4	4
70016 - CEI	2	2
70017 - Core Facilities	3	3
70021 - HPAIRI	2	2
70023 - WIHR	1	1
71002 - Pre-Award Services	10	10
71003 - Compliance	7	7
71004 - ARCC	8	8
71005- WYSAC	25	21
72003 - OISP	3	3
70006 - SBDC	17	17
10502 - COIFPM	15	11

In addition to the sufficient staffing of all units, REDD has intentionally collaborated across different divisions to maximize efficient use of available resources. Examples of such collaborations are listed in Table 3.

Table 3. Examples of collaboration between REDD and other units.

Unit	Collaboration examples
OGC	Hired two Assoc General Counsels in Preaward Services for agreement negotiations
Colleges	Grant Development Managers in CHS, CALSNR, CEPS, and HSENR; Associate Deans for advising on changes CEI Director with official associations with CoB and CEPS
UW Foundation	Jointly funded Office of Industry and Strategic Partnerships
Operations	Unified vision for a safety office at UW
Budget and Finance	Close collaboration regarding data reporting
Academic Affairs	Collaboration regarding HERD reporting



Goal 2: Improve processes for enhanced customer service and efficiency.

As we staff all units that serve the campus, we also wanted to focus on customer service and improvement of processes to bolster customer satisfaction and improve efficiencies. Therefore, REDD provided training to all staff in the campus-serving units of REDD in collaboration with the College of Business. One session covered the basics of customer service and how to identify their needs. The second session taught process improvement strategies to address customer needs. After the training, each unit was expected to improve one process and implement it in FY2025. An example of such process change is given below.

In FY2024, the Agreement Review team in the Pre-Award Services Office, in collaboration with the Office of General Counsel and in consultation with Maria Jenks from the College of Business, initiated a process improvement project on the agreement review process. Implemented in FY2025, this initiative aims to streamline workflows, reduce turnaround times for agreement review and award setup, and enhance support for campus stakeholders.

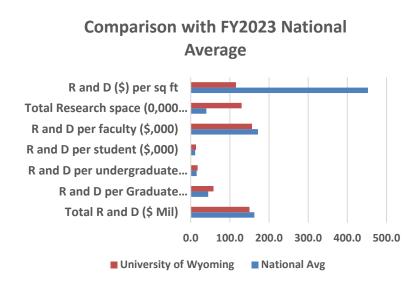
Additionally, the process emphasizes improved transparency and communication with stakeholders to foster clearer expectations and smoother interactions. For standard reviews requiring minimal negotiation, the goal is to complete the process within six business days—from receipt of the award to negotiation, signature, and submission to the Office of Sponsored Programs for account setup in WyoCloud. During the feedback sessions held in November, we heard that the campus has observed improvements in the agreement review and award setup processes over the past year with the implementation of the ROAMWyo system. The team is actively working to identify the most efficient and effective method to measure progress toward this goal within the system.

Goals for FY2025

Mission Goal 1: Increase research expenditures and reputation in all disciplines.

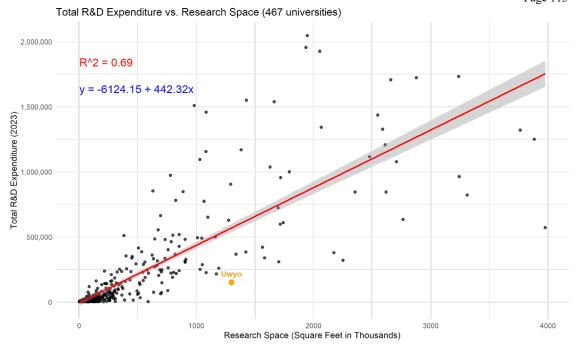
Comparison with national averages identifies some opportunities for growth of the UW research enterprise.

• Increase research productivity: Although UW has a higher level of R&D expenditure per student than the national average, the R&D per faculty is about 10 percent lower than the national average. In FY25, REDD will offer strategic seed grant opportunities for strengthening applications, will create grant development workshops for preparing CAREER applications and will provide grant preparation logistics help through college-embedded grant preparation managers.

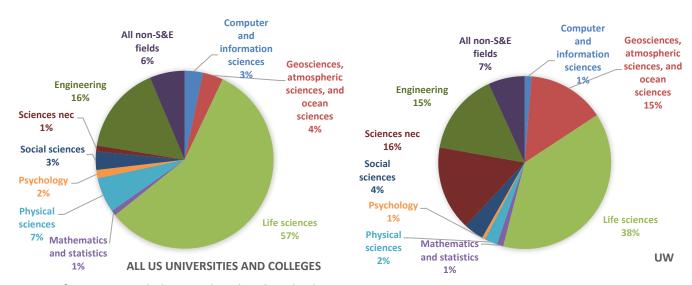


The data also shows that UW does not use

its research space as effectively as other universities since it has only 26 percent of the national average for R and D expenditures per sq ft of research space. A thoughtful approach to modernize the research space and increase its effectiveness in supporting research expenditures is needed. Also needed is the repair, upgrades, and coordinated management of laboratory animal facilities that fetch high value grants from agencies like NIH and NSF.



• Foster data-driven team science that addresses convergence: Future opportunities for obtaining research funding will require UW research to use data-driven approaches, particularly using AI, in addressing societal challenges and economic prosperity opportunities. Based on the recent science nominations by President Trump, it is prudent to assume that the federal agencies will emphasize these research approaches in their priorities. Consequently, UW need to strategically foster AI enabled research in the Wyoming-relevant areas, such as energy, wildlife, and natural resources. About 15 percent of UW's R&D expenditures in FY23 are for research in geosciences and atmospheric sciences (including petroleum engineering). UW is ranked in the top 50 institutions for geosciences R&D expenditures. UW must continue to build on this strength, which is relevant to Wyoming's economic interests in energy, mining, and tourism. Team science projects allow UW to compete for larger center-scale grants.



Note: Life Sciences include agricultural and medical R&D.

Assess indirect cost recovery and distribution models: UW Indirect cost recovery recovers far less (40 percent of allowable indirect costs) indirect costs than the national average (72 percent). It will University of Wyoming National Avg be important to understand the reasons and identify ways to increase indirect cost recover to ensure financial

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10.0

■ indirect cost recovered (\$ mil)

■ indirect costs not recovered (\$ mil)

0.0

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20.0

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30.0

40.0

Mission Goal 2: Foster economic development by building a vibrant innovation support and culture at UW while providing technical assistance across the state of Wyoming.

To enhance the culture of innovation and impacts to serve the state, REDD will continue to implement its Innovation and Economic Prosperity Growth and Improvement Plan (attached to this report). The specific goals for FY2025 include:

- Construction and completion of the innovation and economic engagement ecosystem: While completely developing the Center for Entrepreneurship and Innovation, REDD will explore research park potential and implementation as well as UW-specific venture capital opportunities.
- Enhancement of the entrepreneurship, innovation, and economic engagement culture at UW: REDD will increase effectiveness of ART programs and enhance the IMPACT307 offerings to encourage innovation activities on campus.
- Expansion of strategic communication and training to maximize innovation and economic engagement awareness: Working closely with UW marketing staff, REDD will execute marketing strategies and produce products demonstrating how UW is enhancing UW student experiences through research and innovation as well as how UW is 'present' throughout the state to promote economic prosperity.

Management Goal 1: Continuous process improvements

REDD's service units will continue to monitor progress of current process improvements and will implement new changes to address the customer feedback and needs.

Management Goal 2: Staff professional development and morale

sustainability of its growing research enterprise. With the

current level of indirect cost recovery, it will be difficult to sustain the current rate of increase in UW's research activities.

After being sufficiently staffed, it is important to keep the staff engaged, motivated, and retained through professional development and career progress opportunities at UW.

2. REDD Highlights: Expanding Knowledge Enterprise

Over \$2 million

Seed Grant Funds to UW faculty

Funding from the Board of Trustees, REDD, SI, and various federal grants resulted in more than \$2 million provided to UW faculty as seed grants.

Increased Submissions

Strategic help for preparing applications, additional staff for pre-award services, and increased number of seed grant opportunities resulted in more proposal submissions in FY2024 than in FY2023.

38%

\$150.4 million

Sponsored Funds Received

Average annual funds for the research, instruction, or public service projects received during FY19-23 were \$120 million (includes COVID-related projects in FY21)

Total Research Expenditures

In FY2023, UW's research expenditures exceeded \$150 million for the first time. UW increased its research expenditures by 11.5% in FY2024, the highest level in its history. Total expenditures include sponsored research expenditures as well as institutional investments in research.

\$167.3 million

5

New CAREER awardees

In FY24, five UW faculty received NSF CAREER awards, which represent NSF's most prestigious recognition of early career faculty that demonstrate teacher-scholar leadership by integrating their research and educational activities. In comparison, UW faculty received total of 31 CAREER awards in 27 prior years (1.15 per year).

3. REDD Highlights: Enhancing State-wide Engagement					
6,736	PreK-12 and citizen outreach The SI Roadshow brought active learning to 6,736 PreK-12 students and senior citizens during 37 outreach and inreach events in schools and other venues, more than doubling our reach over last year.				
Active Learning LAMP-trained educators at UW taught 5,763 UW students in active learning classes. The LAMP Fellows program trained 35 instructors from 6 WY institutions of higher education.	35				
46	Wyoming Research Scholars Of 46 undergraduate students conducting research as Wyoming Research Scholars, 24 are from 10 counties in Wyoming. Others come from 11 different states.				
New Businesses Started SBDC staff served 1,392 clients, receiving attribution from 54 clients starting new businesses, 39 equity infusion transactions totaling more than \$4.6 million, reporting more than \$135 million in annual sales with \$1.4 million in sales revenue growth, and supporting 1,857 jobs.	33				
\$1.95 million	SBIR/STTR success Wyoming SBIR/STTR Initiative helped Wyoming small businesses receive more than \$1.95 million in capital infusion in their businesses.				

4. REDD Highlights: Fostering Innovation				
10	University start-ups currently active Two new UW start-ups moved into the IMPACT307 incubator: (1) MayPall, LLC, co-founded by UW Professor Mark Gomelsky and two UW students Leo Gomelsky and Lucas Wall; and (2) Carbanado Technology, LLC, founded by UW scientist Chooi Kim Lau.			
Licensing income Of \$4.8 million in licensing income received by UW to date, 10% was received in FY24. UW signed 3 new commercialization agreements and 8 are in negotiations.	\$480,000			
16	Patents Granted UW is one of the top universities in number of patents issued per 100 faculty members. UW filed 16 patents in 2024.			
Industry Research Agreements More than 770 contacts were made with industry, and many discussions are still in progress. Establishment of the Industry and Strategic Partnerships Office and improvements in the agreement process have already yielded results (15 industry research agreements in FY24 compared to 5 in FY23).	15			
\$33 million	Industry and Foundation Support Funds from Foundations and Industry either as gifts or grants to UW.			

5. Research Centers and Institutes

The VP for Research and Economic Development oversees the multidisciplinary institutes and centers as well as creation of new research teams and development of new applications. As such, seed grants for faculty-driven strategically important projects are a priority for VPRED.

UW Science Institute

Based on the report of the SI2025 committee (posted at https://www.uwyo.edu/research/statistics/index.html, UW established the Science Institute to manage the UW Top Tier Science Initiative and its programs. The Science Institute catalyzes convergence of physical, social, and biological sciences, engineering, humanities, and computing to address Wyoming's needs through transformative research, engagement, and experiential learning. It is expected that the UW Science Institute will be fully operational in FY25 under leadership of its newly appointed Director Professor Jay Gatlin. The Institute currently contains two permanent centers (one for education and engagement activities and other for instrumentation) and five thematic centers (Controlled Environment Agriculture, Energy Materials, Quantum Information Sciences and Engineering, Wildlife and Technology, and Rural Resilience). The Institute budget includes Science Initiative funding, many federal and private grants and support from REDD for core functions. The Science Initiative annual report is presented to the Board of Trustees in their January meeting and contains detailed description of accomplishments.

High Plains American Indian Research Institute (HPAIRI)

HPAIRI is an entity that tribes and scholars can access and utilize both tribally driven projects and UW-conducted research that pertains to Native American people, their lands, and resources. HPAIRI staff is located both on campus and on the Wind River Indian Reservation. HPAIRI has continued to play a critical role in many institutional grants to UW, including WY-ACT, the NSF EPSCoR Track 1 Project and CO-WY Innovation Engine.

- WY-Anticipating Climate Transitions (WY-ACT): in this large institutional grant, HPAIRI facilitated coproduction of
 knowledge on the Wind River Indian Reservation by bringing in key organizations on the reservation to the table.
 These include Tribal Fish and Game, Tribal Water Engineers Office, WRTBI Crow Creek Stream Restoration,
 Central Wyoming College, Greater Yellowstone Coalition, and Homeland Security staff on the reservation. Based
 on these coproduction events, data will be collected on streams on the reservation.
- CIRCLES Alliance is funded by NSF to support a consortium in the mountain west and great plains region to coordinate research endeavors on tribal lands. in FY24, HPAIRI facilitated the CIRCLES Alliance meeting on the Wind River Reservation. It also planned a K12 language and culture workshop which will be held in FY25.
- DOE WyoTCH grant includes a key role for HPAIRI in connecting the grant activities to the needs of the reservation. In 24, HPAIRI worked with SER in organizing Indian Energy Summit.
- USDA/NIFA funded New Beginning for Tribal Students engaged 27 tribal students in collaboration with Central Wyoming Community College.
- In FY2024, HPAIRI supported two graduate students and placed five undergraduate students in internships on the reservation.

UW Institute at the AMK Ranch

The University of Wyoming Institute at the AMK Ranch is a cooperative effort between the University of Wyoming and the National Park Service. Headquartered on the University of Wyoming campus in Laramie, the UW Institute at AMK Ranch promotes multidisciplinary research in the Yellowstone-Teton area of Rocky Mountains. The Institute operates a field research station at AMK Ranch in Grand Teton National Park, which is open from mid-May through mid- October.

Key activities and accomplishments of the AMK ranch are listed below:

- The field station remained open for full season (June 15 through September 30), hosting researchers, courses, and conferences, including over 2200 user-nights by the UW community and an additional 800+ user-nights by scholars from around the country and world.
- The Harlow summer seminar series included 8 events with 620 in-person attendees and many more watching seminars after they were posted online. Seminars included talks by UW faculty and their collaborators on a variety of topics.
- In partnership with Grand Teton National Park, the AMK Institute awarded 12 small grants to seed new
 research in the region on diverse topics including sagebrush restoration, interactions between bison and
 ungulates, native mussel conservation, squirrel effects on biodiversity, tectonic conditions in the Tetons, and
 forest ecology.
- A Forest GEO plot supported by REDD will connect forest research in the GYE to a worldwide network of studies enhancing both local decision-making regarding forest health with implications for wildlife and tourism as well as contributing to a global understanding of changing forest dynamics. REDD also supported a successful Fall 2024 deployment of a SAGE node as part of a larger network of sensors that, in combination with edge computing and AU will help address issues of relevance to the GYE.
- The UW Board of Trustees Research Excellence Fund provided seed grant funding for a new interdisciplinary project studying ecological networks and ecosystem resilience in the GYE. This work, based at the AMK Ranch generated preliminary data that will be used to obtain extramural funding to support the long-term research at the AMK ranch.

Center of Innovation for Flow Through Porous Media (COIFPM)

COIFPM is the world leader in research, development, and practical implementation of novel breakthrough technologies for extraction of oil and gas and geo-storage of greenhouse gases. It is arguably the world's largest experimental and computational research center focused on flow through porous media problems with applications primarily in oil and gas recovery, carbon utilization and storage, and hydrogen storage. The facility provides imaging and flow capabilities at atomic, nano, micro, and macro scales. Furthermore, it establishes a massive capacity for users to conduct numerous studies in parallel. In 2024, COIFPM continued to excel in training a large group of graduate students (~25 Ph.D. students at a steady state level) in projects that merge academic and industrial interests in areas critical to Wyoming's economy. The major research agreements worth \$65 million were negotiated in FY24 with ThermoFisher Scientific and ACUEnergy. In addition, the center began implementation the first phase of Wyoming Gas Injection Initiative with \$25 million of state funds to be matched by equal funding from oil industry. COIFPM remains a high research activity unit with more than \$7 million annually in research expenditures.

Wyoming Institute for Humanities Research (WIHR)

The Wyoming Institute for Humanities Research strives to be an engine for producing interdisciplinary research in the humanities; a community for faculty, students, and the public; and a model of democratic education fit for our land-grant university. WIHR started reporting to VPRED from FY2024. In this year, WIHR continued its activities:

- Humanities Research Group: WIHR awards fellowships for its Humanities Research Group program to about 6 faculty members. Fellows work together in weekly meetings, in which they work on publication, performance, exhibition, or an external grant or fellowship proposal for submission within twelve months of the receipt of the fellowship.
- **Democracy Lab:** This WIHR program gathers an interdisciplinary and intergenerational team of people (faculty, students, and community members) committed to the work of improving the quality of democracy and equality in our state, the nation, and the world. Their projects lead to tangible products.

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Events: WIHR primarily co-sponsored various humanities-related events organized by other groups on campus.

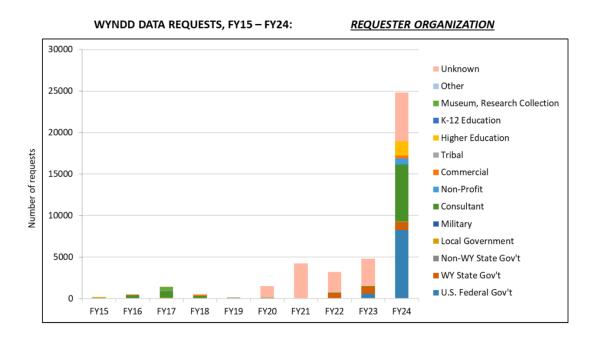
In 2024, WIHR underwent self-study and a review by a committee of external and internal experts. Based on their recommendations, WIHR will be reimagined to invest in all faculty across the campus, to foster areas of excellence where UW can make unique contributions, and to position UW as a globally preeminent and nationally competitive place for Wyoming-relevant topics.

Wyoming Natural Diversity Database (WYNDD)

The Wyoming Natural Diversity Database (WYNDD) is a service and research unit of the University of Wyoming that maintains a comprehensive database on the distribution and ecology of rare plants, rare animals, and important plant communities in Wyoming. WYNDD distributes this information upon request under the philosophy that the best decisions regarding natural resources will be made only when everyone has access to complete and current scientific data. The demand for data from WYNDD continues to increase. WYNDD employed 16 staff and research faculty and train 11 graduate students and 14 undergraduate students. Through 50 externally funded research projects, WYNDD added 624.7 thousand observations to its database in FY24.

Wyoming Survey & Analysis Center (WYSAC)

WYSAC seeks to provide clear, accurate, and useful information to decision-makers through applied social research, scientific polling, information technology services, and rigorous program evaluation. As such, WYSAC conducts research for government agencies, educational institutions, and other entities in Wyoming and beyond. WYSAC currently employs 25 full-time faculty and staff, one GA, and roughly 65 hourly-non-benefited research aides to accomplish our research efforts. WYSAC's total operational and research expenditures for FY 2024 were approximately \$3,532,383 funded entirely from sponsored projects, associated Indirect Costs, and Project Residuals. Ongoing or completed sponsored projects in FY 2024 represent a total of \$4,546,289 in external funding secured by our research faculty. WYSAC performed work on 52 different projects for sponsors during the year. The sponsors include 52 non-federal agencies. Non-federal agencies included six Wyoming state agencies and seven NPOs with the remainder as out-of-state organizations and out-of-state state agencies. In FY2024, WYSAC published 21 project reports on a variety of topics including rural health, political beliefs, environmental inclinations, and social issues https://wysac.uwyo.edu/wysac/category/projects/?doing_wp_cron=1736138234.0335569381713867187500.



Wyoming Institutional Center Grants

INBRE

The Wyoming IDeA Networks for Biomedical Excellence (INBRE) Program is funded by the National Institutes for Health. The INBRE program funds statewide networks of higher education and research institutions in each IDeA-state and Puerto Rico to build biomedical research capacity through support for faculty research and mentoring, student participation in research, and research infrastructure enhancement at network institutions. The Wyoming INBRE works collaboratively with all community colleges in Wyoming to advance opportunities for biomedical research experiences in all institutions of higher education in Wyoming. During FY2024, INBRE provided research experiences for dozens of undergraduate students at UW and WY Community Colleges and supported research activities and infrastructure at UW as well as at every community college in the state.

COBRE

Wyoming Sensory Biology Center (SBC) is a phase II (P20) Center of Biomedical Research Excellence program (COBRE) funded by the National Institute of General Medical Sciences (NIGMS) of the National Institutes of Health (NIH). The primary mission of the SBC is to foster and conduct high-quality scientific research that advances the understanding of our sensory systems and disorders related to them.

Wyoming NSF EPSCoR Track 1

The NSF EPSCoR Track 1 grant and associated programs have helped move Wyoming along the path of research and excellence by supporting the State's research endeavors. The current \$20 million project, the Wyoming Anticipating Climate Transitions, or WY-ACT, addresses the ecological and socioeconomic consequences of changes in water resources. The project will substantially augment capabilities for refining and applying local- and regional-scale models collaboratively developed with stakeholders that address scenarios related to abrupt shifts in water availability. This coproduction of knowledge is a unique component of this effort. A significant part of this research is performed at the AMK ranch and adjacent areas.

6. Service and Resource Units for the Campus and the State

NCAR Wyoming Supercomputing Center (NWSC)

The NCAR Wyoming Supercomputing Center (NWSC) represents a collaboration between NCAR and UW. Through this center, 320 million core hours of the <u>Derecho System</u> are available for UW-led projects in the atmospheric, earth system, geological, other NSF-supported sciences, and science areas of interest to Wyoming. The University of Wyoming compute time allocation on Derecho increased to 320 million CPU Core Hours per year from 160 million CPU Core Hours per year on the Cheyenne Supercomputer, and an additional 320,000 GPU Node hours per year is also available for UW faculty and students for General Purpose Graphical Processing Unit (GPGPU) computations. Derecho Supercomputer hardware, consisting of 420 NVIDIA A100 GPUs, is ideally suited for UW faculty and students researching Al in addition to HPC research. In FY2024, the focus was to facilitate use of the new Derecho computer through faculty training as well as to provide opportunities for broad use (not just geoscience and atmospheric sciences) and dedicated use (Derecho Professorship).

- A total of 69.50 million CPU core hours on NWSC-2 (Cheyenne) were allotted to nine projects in July 2023 for three years. These projects were transitioned onto Derecho in November 2023.
- A total of 235.22 million CPU core hours and 110,000 GPU Node hours on NWSC-3 (Derecho) were allotted to six projects in June 2024.
- Small Allocations (CPU Core hours 1.0 million or less): Thirteen small allocation research projects were approved for a total of 10.0 million CPU core hours.
- So far 10 Derecho professorships have been awarded, with a total compute time allocation of 39.25 million CPU core hours.
- To support several external grant proposals submitted by UW faculty from January 1, 2024, we have committed to provide a total compute time of 198 million CPU core hours per year for the next three years on the Derecho Supercomputer.

Since most of the three-year large allocation projects are in their first year of allocations, and also due to transitioning from Cheyenne to Derecho, the total usage of the allocated CPU core hours is small. We anticipate the rate of usage will ramp up and increase significantly in the second and third years. The request for GPU compute time on Derecho is small compared to CPU core hour requests due to all the large projects do not need GPUs since their research focus is not on Al but HPC.

Advanced Research Computing Center (ARCC)

ARCC is the primary research computing facility for the University of Wyoming. ARCC provides centralized scientific computing resources, including HPC and research storage. ARCC Beartooth Cluster contains old hardware from previous Moran and Teton Clusters and can provide 130 million CPU Core Hours. This facility is often used by faculty for obtaining preliminary results for the projects that migrate to larger use on NWSC. In FY24, Wyoming legislature provided \$5 million for updating and upgrading the cluster. The new clusters (Medicine Bow) were purchased and installed by Summer 2024. The Medicine Bow (MB) Cluster, the upgrade to the Beartooth Cluster, was commissioned and went online on June 1st, 2024. The MB cluster consists of a significantly different and advanced hardware architecture based on the heterogeneous architecture consisting of 25 Homogenous CPU Compute nodes with 19 Heterogenous GPU nodes. The 19 Heterogenous nodes host 48 H100, 40 L40, and 64 A30 GPUs. A total of 152 NVIDIA GPUs are available for UW faculty and students for computational research. The H100 GPUs are the latest commercially

available GPUs. The Medicine Bow cluster is a 2.10 petaflop cluster. The Medicine Bow cluster will eventually replace the Beartooth cluster. This new cluster, along with recent hiring of computing and computer science faculty will increase the use of ARCC.

- ARCC staff have conducted a total of twelve training workshops in FY2024. The details of these workshops are
 available at https://support.pathfinder.arcc.uwyo.edu/Workshops-2024.xlsx
- A total of 127 projects involving 529 UW users are currently using the Medicine Bow cluster. In the first half year, 61.5 percent of the core capacity of ARCC's new cluster is being used.
- In addition to user support, system administration, and hardware maintenance of all the compute and storage clusters, ARCC provides project and specialized service support to various UW entities.
- UW faculty have invested ~\$600 thousand in the ARCC for additional hardware resources and reserved utilization on the Medicine Bow cluster.

Research Development and EPSCoR/IDeA Office

The Research Development and EPSCoR-IDeA Office was established to provide additional research development support on campus, from finding opportunities to helping create interdisciplinary teams to providing professional development opportunities and assisting with proposal development, all to enhance research opportunities and success in Wyoming. In addition, Research Development serves as a centralized office for EPSCoR-IDeA, limited submission, and REDD seed grant opportunities on campus and throughout the state.

Over the past year, the unit hired necessary staff to provide research development support across campus and to develop relationships within the state. Protocols and procedures have been developed for limited submission, EPSCoR-IDeA, and REDD seed grant opportunities. Protocols and procedures were also created for assisting with Medicine Bow National Park research permits. The RDO office was involved in planning and developing several events on campus, including Undergraduate Research and Inquiry Day, a GRFP graduate student workshop, RDO Open House, as well as an Early Career Seminar series for new faculty, all of which will continue into the next year. We assisted with several workshops on campus as well, including the NSF EPSCoR BioSens conference in July, the NSF Four Corners Alliance workshop, and the Grant Writing Seminar taking place this semester. In the fall of 2024, the unit hosted two PIVOT RP training webinars for faculty – one focused on STEM faculty and one focused on Arts & Humanities faculty to help in identification of opportunities. EPSCoR is engaged in discussions with faculty at LCCC about submitting an NSF E-CORE proposal in July that would focus on building resources to support STEM education, research opportunities, and workforce development at the community colleges and UW.

Office of Industry and Strategic Partnerships (OISP)

To coordinate campus wide activities and increase industry collaborations and strategic partnerships with community colleges and local organizations, the new Office of Industry & Strategic Partnerships (OISP) was established with staff from REDD and the UW Foundation. OISP staffing and infrastructure is being constructed to enhance UW's research and economic development interactions with corporations and small industries, local governments, non- governmental organizations, and education communities. The office also coordinates UW participation in economic development efforts including Wyoming Innovation Partnerships, CO-WY Climate Resiliency Innovation Engine, and ID-WY Nuclear Technology Hub. It also houses and implements the EDA funded University Center.

Total Number of Companies that Engaged in FY24: 815

- OSP contracts: 26
- Non-gift research support: 92
- Companies that gave in FY 2024: 716
- Total dollars engaged by companies in FY 2024: \$16,754,070.44

- OSP contracts: \$6,314,084.55
- Non-gift research support: \$1,660,507.16
- Dollars given in FY 2024: \$8,779,478.73
- Total number of non-industry partnership contacts engaged externally in FY24: 577
- Partnerships/collaborations established (via agreement, letter, grant application, program, project, event): 42

Office of Research Integrity and Compliance

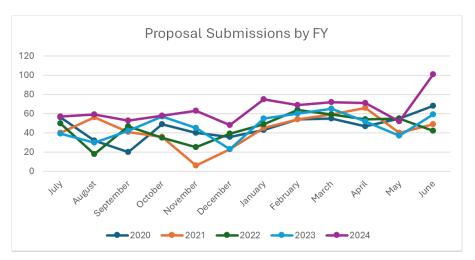
This fiscal year, the Office of Research Integrity and Compliance implemented several strategic process improvements, enhancing efficiency and service across key areas such as Animal Research, Human Subjects Research, Responsible Conduct of Research (RCR), Conflict of Interest and Commitment (COI/COC), Radiation Safety, and Biological Safety. Notably, the introduction of workflow optimization measures in animal research protocols significantly reduced protocol approval times by over 40 percent. Key accomplishments in human subjects research include the successful launch of the ROAMWyo Human Ethics module, resulting in reduced review times and improved user experience.

The office also strengthened compliance by rolling out new training programs and implementing new policies, systems, and procedures for COI and COC reporting for the entire university. In radiation safety, leadership and regulatory innovations marked significant milestones, such as the creation of new permit classifications and the successful transfer of special nuclear material. Finally, the approval of the Animal Biosafety Level 3 research facility at the Wyoming State Veterinary Laboratory further enhances the research infrastructure at UW opening the doors to new funding opportunities. These achievements underscore our commitment to regulatory excellence, streamlined processes, and proactive training initiatives in support of research integrity at UW.

Pre-Award Services Office

Staffing: At the end of FY2024 the Pre-Award Services team had eight full-time employees (FTEs) and two part-time

interns. Two Pre-Award Interns (students) were hired to assist the Pre-Award Office to help provide additional support. *Proposal Submissions:* In FY2024, the Pre-Award team submitted 778 proposals, reflecting a 37.94 percent increase over FY2023. June 2024 was the highest submission month, with 101 proposals, representing 13 percent of the total annual submissions. This was the Office's first full fiscal year utilizing the ROAMWyo Sponsored Projects module, which contributed to better proposal data than in previous years.



Core Facilities

REDD manages several multiuser core facilities that provide service to researchers at UW and outside in conducting specialized assays. These are essential for maintaining and enhancing the research enterprise at UW. To streamline operation of core facilities across the campus, a committee of the faculty and facility directors was convened to make recommendations, which will be implemented in FY2025. In FY24, two of the facilities were evaluated by a committee of experts. Based on their recommendations, one facility (Ecological Biogeochemistry Lab) was closed since the

services were already being provided by other facilities on the campus and the facility was not economically sustainable. All user facilities are expected to recover their costs from user fees or dedicated state support (if established as part of an appropriation as in case of SI supported facilities).

Technology Transfer Office

The Technology Transfer Office supports UW faculty and scientists in translating their research to societal use through the protection, marketing, and ultimate transfer of their intellectual property to industry. In FY2023, the Technology Transfer Office (TTO) lost staff members, including its director. To facilitate transition to a reimagined TTO, interim director role and other services were contracted. TTO has been in the process of restructuring since April 2023, creating a solid foundation for the TTO and anticipated growth of the research enterprise as the University achieves R1 status. Major accomplishments are in the table below.

Table 4. Matrix for TTO outputs

Fiscal Year	FY18	FY19	FY20	FY21	FY22*	FY23	FY24
TTO Metrics							
Invention Disclosures	37	30	45	21	27	40	32
U.S. Patent Applications Filed*	58	32	14	18	27	33	39
U.S. Patents Granted	7	11	10	14	13	17	16
Total Licenses and Options Executed	0	1	2	0	1	0	2
New Startups Formed	0	0	2	0	-	1	1
Industry Sponsored Agreements					-	5	15
Facilitated**							
CDA's Executed***	65	92	37	11	2	56	80
MTA's Executed	40	36	20	0	0	~70	58

These metrics reflect the data that is reportable to AUTM as well as additional metrics that are relevant to the University of Wyoming

Small Business Development Center Network (SBDC and related services)

The Wyoming SBDC Network is a partnership among UW, the Wyoming Business Council, and the U.S. Small Business Administration offering business expertise and technical assistance to help Wyoming's small businesses start, grow, reinvent, or exit. Wyoming Small Business Development Center Network provides no-cost, full-service, customized small business advising for all stages of the business lifecycle, no matter the industry.

- Eleven Wyoming SBDC Network podcast episodes launched during FY24 featuring training topics, discussions with leaders, and conversations with small business owners.
- Seventeen webinars (Nine under Cybersecurity, Five under Innovation Funding and Three under Marketing) were recorded for anytime viewing and two new biz tips were added to our library this
- In collaboration with the Small Business Administration, 15 "The Inside Scoop: How to Get Your First Small Business Loan Request Approved" sessions were held between January-May in fifteen different communities across the state.
- A record number of registrants /attendees (60 registrants, 36 attendees) for two in-person, Start Your Own Business workshops held at the Natrona County Public Library in January and then in March.
- Hosted open house events in nearly every SBDC region in the state to celebrate National SBDC Day on March
 20. Clients and stakeholders were invited to attend, network, and engage with SBDC staff and advisors.
- Wrapped up two supplemental programs, the SBA Community Navigator Pilot Program (ended May 31) and

the SBA Portable Assistance Program (ended April 30). See complete award period accomplishments, activities and final metrics under the supplemental programs.

Apex Accelerator (formerly PTAC) Achievements include:

- Held 21 training events
- Held four reportable (promoted/attended/client and/or stakeholder participation) events
- APEX clients were awarded a total of \$72,257,787 in combined Wyoming state and federal contracts.
 - Of these contracting dollars, \$13,153,005 was awarded to HUBZone certified firms, \$9,507,906 to Service Disabled Veteran Owned firms, and \$13,047,444 to certified Woman Owned Small Businesses.
- Shifted to the Department of Defense's Office of Small Business Programs as new federal funder.
- Hosted the Government Contracting Summit in partnership with the Wyoming SBA District Office.

Manufacturing Works

As Wyoming's Center in the National Institute of Standards and Technology (NIST)'s national manufacturing extension partnership network, Manufacturing Works assists Wyoming manufacturers, producers, and entrepreneurs in growing their revenues, increasing their productivity and performance, and strengthening their global competitiveness.

Manufacturing Works tailors its services to meet the critical needs of Wyoming manufacturers, ranging from process improvement and workforce development to cybersecurity and supplier scouting. Through collaboration with a wide array of <u>industry partners</u>, Manufacturing Works strategically identifies and solves clients' most pressing issues, enabling them to elevate their business to the next level. 2024 was a transformative year for the Manufacturing Works. It continued to support the state's manufacturers, helping them increase efficiency, adopt advanced technologies, and grow their businesses. The focus is on fostering innovation, driving economic growth, and building a resilient and sustainable manufacturing sector in Wyoming.

Impact307

IMPACT 307 was formulated as a network of innovation-driven business incubators committed to expanding and strengthening Wyoming's entrepreneurial community by providing resources and support for founders/entrepreneurs to thrive. Since its establishment, IMPACT307 and its predecessor assisted in establishment of 243 Wyoming companies. In 2023, IMPACT 307 marked a significant milestone by successfully completing its 38th Start-Up Challenge. In 2024, the unit has undergone major changes that have downsized the number of community offices to two (Casper and Laramie) and is currently rebuilding under a new assistant director hired in the fall of 2024. This downsizing was in response to the end of grant funding from EDA, Wyoming Business Council, and Wyoming Innovation Partnerships; these grants had enabled state-wide expansion of activities. During the transition year and thereafter, UW continues to keep the community engagement and collaborations. For example, a start-up challenge was recently held in Casper by Advance Casper. In collaboration with Advance Casper, UW will invest in the start-up prizes using endowment funds available to IMPACT307.

Center for Entrepreneurship and Innovation (CEI)

CEI fosters entrepreneurship training and culture across UW, including marketing an entrepreneurship minor for all majors, innovation-based courses, and training for students, postdocs, faculty, facilitating interaction with incubators such as Impact307 hubs to build a pipeline of innovators for Wyoming.

- CEI is launching an innovation course in collaboration with the SBDC and the College of Business (ENTR 4910 Innovation Consulting).
- UW chapter of the Collegiate Entrepreneurship Organization (Student Club), which is in process of UW approval for Spring 2025. Approved by the CEO organization as a Wyoming Chapter.

UW Board of Trustees Report -- Public Session January 22-24, 2025

Creation of the Master Craftsman experiential learning program (in collaboration with Visual Arts within the College of Arts and Sciences). This is a program in which students gain training and hands-on skills from bidding, idea generation, and design coupled with the knowledge of materials and equipment resulting in a tangible product. This is on track for pilot in the spring of 2025.

REDD Marketing and Communications staff

Marketing and Communications for the Research and Economic Development Division was fully staffed for most of FY2024 with two full-time positions filled June 2023-April 2024. One employee left in April, and a search was conducted, and the second position was filled again by June 2024. The office has focused on elevating and maintaining awareness among UW and REDD stakeholders for the ongoing activities and achievements of REDD units. This includes ongoing upgrades and maintenance of the REDD portion of the UWyo.edu website, promoting news via Institutional Marketing, posting news and information on social media (Facebook, Instagram and LinkedIn) and generating stories for distribution via digital, print and video media formats. REDD themed Giving Day campaign created and resulted in three donations, very little promotion or outreach took place. REDD's first Annual Celebration of Excellence in Research and Innovation was held in January 2024, and the marketing team created materials for invite, agenda and presentation materials for the event.

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7. Appendix: UW's Innovation and Economic Prosperity Designation Application

University of Wyoming Economic and Innovation Ecosystem Growth Plan

1a. Introduction

Wyoming serves as a model for place-based innovation and economic prosperity in rural America. With no town above 60,000 people and state population below 600,000, it is among the most rural states. Its economy is heavily dependent on energy and extractives (half of Wyoming's GDP), tourism and outdoor recreation, and agriculture (primarily ranching). In 2022, the Wyoming Business Council (WBC), the State's economic development agency, contracted Harvard's Growth Lab to assess the state economy and identify gaps. It noted vulnerability in a narrow reliance on energy and mineral exports, and recommended collaboration among our research university, the University of Wyoming (UW), Wyoming's community colleges, communities, and state agencies to diversify and cultivate economic opportunity. One of Wyoming Governor Gordon's key initiatives, Wyoming Innovation Partnership (WIP) supports collaboration among its IHEs to catalyze innovation, workforce development, and economic prosperity. WIP committed \$69 million in FY23-25 for many projects, such as a network of makerspaces, coordinated curricula for workforce development aligned with the industry needs, preparing workforce for the emerging industries in the state, and seed funding for creative economy startups.

UW is Wyoming's only university (8,250 undergraduate enrollment) (1) and serves the dual role of a land-grant university and a flagship university. Thus, UW has a servant leadership role in engaging with the eight community colleges and local economic development organizations in advancing innovation and prosperity. With \$150 million in research expenditures in FY23 (2), UW has a strong research base for robust innovation through acceleration of research translation to commercialization and societal impacts. The resulting growth in technology startups, enhanced technical assistance to the existing industry, stronger connections to businesses, and increased knowledge-based jobs in the state will result in economic prosperity in communities with UW presence. UW President Seidel has made entrepreneurship, innovation, and economic prosperity cornerstones of his UW tenure since his arrival. These are now priorities for Deans as well as Vice Presidents (VPs). Consequently, the last four years were a time of unprecedented changes and new opportunities. President Seidel has marshalled UW resources, coordinated with key stakeholders, assembled statewide partnerships, and paved a path towards an inclusive and innovative ecosystem working towards economic prosperity and stronger communities.

UW's new Strategic Plan (3) integrates innovation and economic development activities throughout its goals of student success, faculty excellence, and state-wide engagement. VP Parag Chitnis is responsible for the Research and Economic Development Division (REDD) which includes 21 offices, centers, and institutes, including Small Business Development Center (SBDC) network, Manufacturing Works (MW), Technology Transfer Office (TTO), Center for Entrepreneurship and Innovation (CEI), IMPACT 307, and Office of Industry and Strategic Partnerships (OISP). VP Chitnis leads the Innovation and Economic Prosperity (IEP) designation activities, including self-assessment and implementation of UW's growth and improvement plan. Recent federal grants (EDA's University Centers grant, National Science Foundation's (NSF) Accelerating Research Translation grant, NSF's CO-WY Innovation Engine grant) demonstrate UW's potential for innovation and economic engagement. The IEP self-assessment and plan have allowed UW to identify priorities that address critical gaps and stakeholder needs.

1b. Review of Existing Infrastructure

The UW self-study work, led by REDD in collaboration with relevant campus units, formally kicked off in Fall 2023. President Seidel and REDD VP Chitnis created the taskforce to comprehensively review UW's economic and community engagement profile, incorporating existing reporting and collection of new data to identify goals. The taskforce represented a diverse set of perspectives, expertise, and disciplines ranging from economic development and community engagement to communications and academic units (1).

Self-assessment included two approaches: 1) collect and analyze recent self-studies and reports relevant to IEP designation and 2) conduct more surveys that complete the comprehensive analysis of UW's activities with diverse campus communities as well as external statewide partners.

Assessment of UW economic engagement assets and their effectiveness commenced prior to the formal efforts for IEP designation in Fall 2023. Resource mapping and overall economic development plan were formulated in early 2023, identifying REDD strengths, weaknesses, and capacity in these areas. Building from that momentum, President Seidel and VP Chitnis committed the institution to IEP designation pursuit, carrying out strategic planning sessions in the last quarter of 2023 and in the second quarter of 2024.

Additionally, input/feedback sessions with community stakeholders across the state and surveys created a foundation of data and plans for advancement of UW's economic engagement performance and capacity (2, 3, 4).

The timeline of these strategy and input sessions is as follows:

- -May 2023- REDD Communications Plan Development and synthesis of UW economic development strategies
- -June 2023- Mapping of University Entrepreneurial Resources Available
- -September 2023- Strategic Planning- Incubation and Entrepreneurship Support
- -December 2023- REDD Strategic Planning, IEP briefing to the President's cabinet
- -February 2024- Sheridan-area Entrepreneurial, Small Business, and Economic Development Stakeholders Feedback Session
- -March 2024- Cody-area Stakeholders Feedback Session
- -March 2024- Casper-area Stakeholders Feedback Session
- -May 2024- Service to Campus Strategic Planning
- -July 2024- Process Improvement Strategic Planning, IEP briefing to the President's cabinet as well as the research council (associate deans or deans of colleges and schools)

Survey and Interview Design and Results

In Summer 2024, internal institution-wide survey and external key stakeholder interviews were conducted using the CECE tools. The two-methods approach was chosen to collect quantitative and descriptive information on which strategic and improvement conclusions and plans could be based.

The Wyoming Survey & Analysis Center developed the survey and analyzed the data to assess the current state of UW's economic engagement through all UW employees, to assure largest and widest participation (of UW offices throughout the state). Totaling 41 two-part ranked questions, the survey measured perceived importance placed by UW in specific areas and performance in those areas (footnote, internal survey). The survey questions were categorized by IEP instrument core blocks, scoring with Likert scale 1 to 7, measuring 'not at all important' to very important, and performing 'poorly' to 'very well'.

The survey response rate was 10.9% and received 466/4,273 responses (5). Respondent composition was representative of the distribution of UW employee categories (staff, faculty, administration).

To assess UW's impact across the state, the Association of Public & Land-grant Universities (APLU) IEP external survey tool was adapted into interview format, measuring partner perception of how UW should value/play a role in specific economic engagement activity, and how UW performs in those areas (6). The survey group conducted one-on-one interviews with leaders of nine key stakeholder economic and community engagement organizations and agencies across Wyoming, with whom UW partners on various projects and initiatives and/or represent other agencies and companies that partner with UW: Regional Small Business Association (SBA), Regional Economic Development Administration (EDA), Wyoming Governor's Office, Wyoming Economic Development Association (WEDA), WBC, Wyoming Business Alliance (WBA), Wyoming Community College Commission (WCCC), Wyoming Women's Business Center, and Wyoming Community Foundation (WCF).

High-level internal survey results showed UW should place high importance on all areas measured. The average for all importance scores was 5.7 out of 7. "Performance scores" were lower than "importance scores" on all questions. Performance scores were an overall average of 4.1 out of 7. The Engages and Asserts Institutional Leadership block scored the highest overall and on individual question scoring, demonstrating internal recognition of UW relationships and engagement in state economic growth. "Creates Supportive Culture" was the lowest scoring block, showing the need to better engage and incentivize faculty in economic engagement and improve agreement processes (7).

Interviews revealed comparable results, with elevated levels of statewide stakeholder engagement in economic and research engagement, with a notable increase in commitment to partnerships under the current institutional administration. Clearly communicating programming and points of contact, engagement across internal units, faculty involvement, and user-friendly agreement/contract processes were repeatedly identified as areas to improve (8, 9).

Following the self-study, the taskforce presented to and received feedback from President Seidel, his Cabinet and other campus groups including the Research Council (10). Each group recognized the institution's roles in strengths and weaknesses and endorsed the improvement and collaboration plan and the IEP designation pursuit.

The self-study over the past 14 months comprises of the identification of UW economic engagement strengths, principal improvement areas, and associated action plans. The tools from CECE and their training helped in ensuring that the self-assessment through asset control and surveys lead to a growth and improvement plan that could potentially transform UW's trajectory in economic development.

1c. Economic Engagement Enterprise

Economic engagement at UW is not limited to establishing startups based on research translation. It includes a comprehensive approach to engage internal and external stakeholders to leverage UW resources and provide a coordinated approach to address economic, innovation, and community ecosystem needs. Community and economic engagement are promoted across research, education, and outreach activities at UW. Key external stakeholders include the community colleges, tribal groups and agencies, and state agencies such as WEDA, WBA, and the WBC. UW leadership has prioritized strengthening relationships with external stakeholders. The internal stakeholders are university faculty, staff, and students and the units/offices across UW interested in or engaged in fostering innovation, community, and economic engagement.

In our self-assessment activity, we identified the key units in REDD and at UW that contribute to economic engagement function.

The Small Business Development Center (SBDC) has nine locations in Wyoming and provides education, consulting, market research reports, classes and webinars, publications, web services, federal procurement (through APEX), federal Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) research dollars, and referrals to related agencies.

Manufacturing Works (MW) supported by NIST's Manufacturing Extension Program and WBC. MW provides broad technical help, engineering solutions, business assistance, marketing assistance, and financial counseling to Wyoming's growing manufacturing industry.

The Center for Business Economic Analysis at UW's College of Business, supports the economic growth and diversification of Wyoming's economy through services to businesses and communities such as amenities valuation, data analytics, economic and fiscal impact, economic modeling and forecasting, and access to faculty across UW.

Innovation WYrkshop provides an experiential learning environment across makerspaces to foster community innovation, creativity, curiosity, and entrepreneurship. These makerspaces are housed at educational institutions, public libraries, or community centers in six communities and through mobile trailers. UW provides oversight, programming, and coordination.

Great Plains Hub of NSF Innovation Corps (I-Corps) provides entrepreneurial training for researchers. The TTO, CEI, and IMPACT 307 described below leverage I-Corps to enhance entrepreneurship capacity.

UW Extension's rural vitality programming is key in aiding community development in all 23 Wyoming counties which have UW Extension offices.

IMPACT 307 has two business incubators (Laramie and Casper) committed to growing and strengthening the entrepreneurial community by providing resources and support for startups to thrive. IMPACT 307 is refocusing on high growth-oriented technology-based companies.

Technology Transfer Office (TTO) supports economic development for Wyoming through transfer of UW intellectual property to startups and established industries. In the last several years, the office underwent staff loss, causing reduced results. With new leadership at UW, TTO is now being restaffed with new vision of market-driven innovation strategy.

The Center of Entrepreneurship and Innovation (CEI) was formed recently to integrate innovation across the campus in collaboration with statewide agencies and organizations and for coordinating entrepreneurial educational activities at UW.

The Office of Industry and Strategic Partnerships (OISP) is a newly formed joint effort between REDD and the UW Foundation (UWF), tasked with developing industry engagements. OISP's goal is to increase industry/partner engagement and with economic, workforce, and educational agencies and organizations.

The Research Development Office (RDO) is focused on helping UW researchers to find funding opportunities and aid in proposal preparation, along with leading EPSCoR programming on campus.

UW is developing a core process for interacting with external stakeholders in a planned and cohesive manner to develop and implement an innovation, entrepreneurship, and community engagement ecosystem. Over the last year, UW has engaged more closely with its external stakeholders at all levels starting with the President, resulting in a better understanding of how it can work with and for them. UW's support of its state-wide initiatives has resulted in several notable achievements. And, as always, there is room for substantial improvements in establishing and fostering relations with external and internal stakeholders that can lead to greater success.

1d. Economic Engagement Planning

With UW's engagement enterprise in place, what challenges UW seeks to address, and how, must be carefully considered. Including the self-study for the IEP designation, UW continuously undertakes learning and growth efforts. Under the leadership with President Seidel and VP Chitnis, there is an ardent desire to build on the research, economic development, innovation, and entrepreneurship ecosystems that currently exist at UW. This is shown by the current UW Strategic Plan that integrates innovation and economic engagement commitments throughout the plan:

- -"Prepare students for life and adaptation to a changing and increasingly digital world"
- -"Value and reward all teaching, research, extension, engagement, innovation, inclusion, and service contributions to UW's mission and strengthen relationships with external stakeholders"
- -"Invest in resources that enhance the health and well-being of the UW community"
- -"Support Wyoming's economic and community development using the assets and expertise of all colleges and schools"
- -"Enhance UW's connections with and service to the people of Wyoming"

However, challenges also exist. A recent study (April 2024) conducted by the Building State Capacity group at the Harvard Kennedy School identified several challenges to economic engagement in Wyoming and in Laramie (1). These include lack of collaboration, low tax revenues, remoteness, lack of economic diversification, job market mismatches, low diversity and population, culture and mindset, and low population density.

Independently, UW also recognizes these challenges that need to be addressed: low collaboration with local and state agencies, lack of housing in Laramie, lack of diversification of industry in Laramie and Wyoming, development of programs to train its faculty and student entrepreneurs, and access to capital and space for startups.

Going forward, UW's areas of focus for improvement (details in Growth and Improvement Plan) are to complete the internal infrastructure to support entrepreneurship and innovation ecosystems, accelerate culture changes within UW, expand and enhance communication with stakeholders and partners, and to unite these efforts to fully realize an interconnected innovation ecosystem across the state with the University fully engaged in facilitation.

The desire of REDD to engage and overcome the above challenges points to engaging more proactively with communities; industry; and local, state, and federal agencies. These collaborations are vital to the success of UW's efforts throughout Wyoming and are elaborated in the Growth and Improvement Plan.

To this end, UW leaders prioritized strong ties with the WBC, WEDA, WIP, state legislators, and other stakeholders. In addition, UW is actively engaged on two fronts to map the entrepreneurship and innovation ecosystem (in partnership with WBC and WIP) and develop a network of regionwide organizations and investors through IMPACT 307 and the TTO with funding through the Growth Accelerator Fund Competition at the SBA (2).

UW's support of its state-wide initiatives through its units has resulted in several notable achievements (detailed in the Summary of Accomplishments). However, as always, there is room for substantial improvements in establishing and fostering relations with external and internal stakeholders that can lead to greater success. UW is engaged in discussions on how to best implement its strategic goals as there are multiple focus areas that involve units across UW whose responsibilities range from communication,

community engagement, and social impact to economic development, industry engagement, and startups. The intent is to inculcate a holistic approach by UW to engage all stakeholders in Wyoming's economy.

Key REDD units responsible for this are the OISP, TTO, IMPACT 307, the CEI, and the RDO, along with other UW units such as the Office of Community Engagement (OCE) and Institutional Marketing and Communications. These offices will foster and encourage engagement between UW academic and research units and programs with industry, community, and economic development partners.

1e. Promotions and Communication

Key Communication & Planning Stakeholders: Engaging key stakeholders is essential to promoting economic goals. UW's internal audiences include students—future leaders and innovators, faculty—who drive research and innovation while highlighting and supporting community engagement initiatives. Staff and faculty provide crucial leadership and support in implementing initiatives. UW Trustees provide strategic oversight and guidance, university goal alignment, and extension of program's reach and impact. Alumni are key ambassadors and supporters, leveraging their networks and resources.

Externally, UW engages with a diverse range of stakeholders. These relationships include routine exchange of programming ideas and formal collaborations that extend services and opportunities in Wyoming. Industry partners align research and education with market needs. Governments at local, state, and federal levels provide funding, policy support, and collaboration opportunities. Not-for-profits and community organizations enhance community impact through partnerships. Collaborations with other institutions of higher education foster knowledge exchange and joint research. The Controlled Environment Agriculture collaboration between the University, community colleges, government, and companies, is generating research, workforce, and student opportunities, with funding from the WBC and Governor's Office, with all parties promoting the work (1).

Economic Engagement Communication Strategies: UW employs comprehensive methods to communicate and promote economic engagement efforts internally and externally. UW Institutional Marketing and Communications, in collaboration with REDD, manages internal communication strategies. The university website serves as a hub for news, updates, and resources. Regular updates are sent to the campus community through internal newsletters and bulletins, also serving to engage stakeholders about institutional events and meetings. Social media platforms offer broad outreach to the university community, and regularly distributed donor and alumni publications highlight achievements and opportunities.

Externally, communications strategies include distribution of the Annual Report (2), highlighting UW contributions and impact, regular engagement with media outlets (digital media, newspapers, radio, TV). Institutional Marketing and Communications media relations maximizes coverage and audience awareness. Social media reaches a broad external audience with updates and stories, paid advertising promotes key initiatives and events, and community outreach events, such as public lectures and Undergraduate Research and Inquiry Day (3), offer additional public engagement.

Effectively Sharing the Story: Outlined in the Growth and Improvement Plan section, UW commits to effectively sharing its economic engagement story through a comprehensive communication strategy. Recognizing need to continually strengthen communication and connection with community, Institutional Marketing and Communications has coordinated a series of 15 "UW in Your Community" outreach events across Wyoming in which UW team members travel to communities, connecting with local industry, education, and broader community members to share and hear about UW impact on talent, innovation, and place (4). REDD, in collaboration with Institutional Marketing and Communications, regularly publishes media releases to ensure timely updates on economic development news and works with press to communicate UW's contributions and impact.

Recognizing that UW has fallen behind in communicating innovation and economic engagement activities, REDD took a significant step by creating its own Marketing and Communications group. This group collaborates closely with Institutional Marketing and Communications to amplify internal and external communication efforts. It uses metrics-informed strategies and decision-making to enhance communication

effectiveness, produces in-depth videos, podcasts, and web articles for long-form storytelling, and coordinates social media publications to ensure broader reach and engagement.

REDD is also forming an action committee to address the communication gap found in the self-study. This committee will explore issues in depth developing a comprehensive set of solutions to improve the dissemination of innovation and economic engagement information. Additionally, this year, REDD is starting to publish a regular 16-page section in UWyo Magazine, which appears three times annually and has a distribution of 30,000 subscribers. The first issue of 2025 will feature an edition entirely dedicated to UW innovation and economic development.

This strategic approach ensures UW effectively communicates its economic engagement efforts to and with internal and external stakeholders, enhancing visibility and impact.

1f. Advancing University Engagement Practice

UW's commitment to advancing economic engagement is best characterized by its support of the community of practice with internal and external stakeholders, and active engagement with organizations to share best practices, make connections, and be a catalyst for collaboration.

Key leaders at UW have strong background in growing the research enterprise, engaging in economic development, providing entrepreneurship training, and creating robust workforce development initiatives. This includes President Seidel; VP Parag Chitnis; Deputy VP for Research and Innovation, Arundeep Pradhan; Senior Director of Strategic Partnerships, Curtis Biggs, and Director for the CEI, Robert Macy. The latter three positions are newly created and represent UW's commitment to its mission to participate in and develop the entrepreneurial and innovation ecosystem around the institution and across Wyoming.

As a result of this expertise and leadership there is a strong desire to plan and build on the current innovation and entrepreneurship ecosystem that exists at UW. This is evidenced by the five goals in the current UW strategic plan, as outlined in the Economic Engagement Planning section of this application. The UW strategic plan addresses preparing students for a digital world, investing resources in the UW community, supporting Wyoming's economic and community development, enhancing connections, and valuing and rewarding community, economic, and entrepreneurship activities.

UW will build on these commitments and develop strategies to implement its objectives through the creation of a team comprised of representatives from the offices and outside stakeholders engaged in activities that support innovation and community engagement. UW has several groups and committees that already operate in this area (e.g., Associate Deans for Research Council), and in the first year, UW will identify the appropriate group or committee with which to task these activities. In addition, the University has recently created and filled a key position, the Deputy VP for Research and Innovation, that will play a critical role in the establishment and execution of the strategies to achieve the University's objectives (1).

It will also be important to engage with a broader set of organizations that include the community colleges in Wyoming and the cities in which they are located - Sheridan, Rock Springs, Cheyenne, Casper, Riverton, Gillette, Torrington, and Powell to better understand the needs of the communities in which they are located and how the UW can collaborate with the community colleges to address those needs.

Externally, UW is engaged with multiple organizations such as the APLU, AUTM (previously the Association of University Technology Managers), the Association of University Research Parks, Network of Academic Corporate Relations Officers, National Academy of Inventors, University Economic Development Association, and University Industry Demonstration Partnership. Participation in events led by these organizations allows UW to learn and share practices that will enable UW to incorporate best practices in its efforts to develop the entrepreneurial and innovation ecosystems for Wyoming. Representatives from UW now regularly attend and participate in events hosted by these organizations. In addition to the national organizations listed above, UW is also actively engaged with chambers of commerce across Wyoming, WEDA, Ecosystem Builders Leadership Network, Harvard Growth Lab, and the Interagency Working Group – hosted by the state budget office to help obtain grant funding.

Other initiatives at UW include the Presidential Leadership Academy, Presidential Fellows on economic development that provide incentives for UW employees to participate in economic development and community engagement (2).

UW hosts or participates in local and regional events such as the John P. Ellbogen \$50K Entrepreneurship Competition and Entrepreneurial Ecosystem Competition (held annually since 2001), WIP summit, Governor's Business Forum (collaboration with WBA, now being held on UW campus), Hackathons, SBDC related events, and SBIR/STTR webinars.

Successful engagement programs include Library to Business presentations, the Community Navigator Pilot Program, and SBA small business award winners (3,4,5).

2. Summary of Accomplishments

Through the self-study process, UW has achieved accomplishments in three broad areas necessary to develop, foster, and maintain a vibrant and engaged entrepreneurship and innovation ecosystem: Strengthening Place; Fostering Talent, and Creating Strong Foundations for an Effective Ecosystem for Innovation. These accomplishments map to the goals elaborated in the Growth and Improvement Plan.

The self-study included a thorough review of past activities, initiatives, programs, ongoing efforts, conversations with external and internal stakeholders, and connecting with groups across campus and Wyoming. The process provided a holistic assessment method for getting to the heart of the UW's economic and community engagement, development, and impact. Preparing the application for IEP designation showed certain strengths and achievements echoed throughout this undertaking. Some notable accomplishments outlined below are categorized by how they address the needs of the entrepreneurship and innovation ecosystem and how they relate to goals outlined in the Growth and Improvement Plan.

Accomplishment 1. Strengthening Place through Commitment to Engagement and Impact

These accomplishments focus on strengthening the community, entrepreneurship, and innovation ecosystem. UW's continual commitment to engagement and impact shines in its values, partnerships, and efforts of units, that are shaping campus culture, which has been positively received by internal stakeholders. Additionally, external stakeholders agreed that the university had high engagement levels across Wyoming. Some notable accomplishments are:

-UW's successful 2023 application for Carnegie's Foundation's Elective Classification for Community Engagement highlighted this ongoing work across the institution and state (1). (Goal 2) -Creation of a "roadmap" of best practices to direct community engagement and deepen facilitation and support of engagement. The roadmap identified gaps and allowed UW to develop and implement strategies to address existing gaps through innovative approaches and evaluate the university's community, social, and cultural impact through engagement (2). (Goals 2 and 3)

UW Extension, based out of the College of Agriculture, Life Sciences, and Natural Resources, has offices in each of Wyoming's 23 counties and the Wind River Reservation (3). External stakeholders view Extension as an asset for economic growth. Standout Extension accomplishments include:

- -Cent\$ible Nutrition Program, which is focused on making cooking and eating affordable for low-income homes and financial literacy programs for individuals and families as part of UW's Community Development Education Program (4). (Goals 2)
- -A strong 4H program that has many technology-based outreach and an interest in integrating entrepreneurship training with their programming.

In 2023 UW reestablished the OCE (formerly known as the Office of Engagement and Outreach) (5). This symbolized UW's continued commitment to engagement and impact statewide. In Spring 2024, OCE hosted the Community-Engaged Faculty Institute (6). The sessions served to educate faculty on integrating experiential and service-learning into the classroom, hosting community partners to share expertise and build relationships. OCE's work is highly regarded and valued by internal stakeholders as it conveys UW's high regard of engagement, fostering a campus culture, and prioritizing impact. A notable and significant result of this effort and relationship-building was:

-A faculty course design that provided students hands-on educational and professional development opportunities supported by regional partners. (Goals 1 and 2)

IMPACT 307, MW, and SBDC have a physical presence throughout the state. For example, IMPACT 307, through a grant from EDA, conducted statewide startup challenges, resulting in 309 startups created over a 3-year period.

This focus connecting internal and external stakeholders, activities to achieve impact, exploring opportunities such as experiential learning and mentorship is an area external stakeholder also saw as a strength. These endeavors contribute to the sentiment expressed by both internal and external stakeholders that UW is a strong collaborator with government, business, and community leaders. Further, there is an increasing awareness and appreciation of UW's support of actionable economic growth priorities in Wyoming communities.

Additionally, UW has a strong record of accomplishment in engaging with communities in other settings. Examples include K-12 Roadshow by UW's Science Initiative that visited over a dozen schools and reached over 2000 students annually (over 4,000 in Fall 2023) (7). Similarly, UW organizes UW in Your Community events once a month that involves UW President, administrators, and local UW students engaging with communities around the state.

Accomplishment 2. Fostering Talent On Campus and Statewide

The themes of talent development and innovation were woven throughout the self-study process and emphasized by stakeholders as assets within the professional and academic arenas. In addition, partnerships with local and state agencies and industry were viewed overall as a strong suit of UW by internal stakeholders (8). UW units such as SBDC, MW, and IMPACT 307 speak directly to talent development and innovation fostered by UW units statewide. Programs, events, and trainings developed by IMPACT 307, SBDC, MW, TTO, and the CEI have been and are delivered across UW and Wyoming through partnerships with local economic development organizations and community colleges.

- -Programs through IMPACT 307 and SBDC were spoken of highly by external stakeholders as building blocks of Wyoming's entrepreneurial ecosystem and as a basis for ongoing talent development and innovation opportunities (7, 9, 10). (Goals 1 and 3)
 - -UW's College of Business endeavors interject talent development and innovation into campus and Wyoming. Its annual John P. Ellbogen \$50K Entrepreneurship Competition, now on its 24th year, advances these values through encouraging community college and university students to formulate original business ventures and work with a network of organizations, entrepreneurs, and community investors (11). (Goals 1 and 3)
 - -The College of Business' SparkTank is another innovative program pushing professional, academic development, and community engagement. Comprised of students from the college's Ethics Club, members work with regional nonprofit organizations, getting to know these organizations and their missions, and helping them craft and finalize pitches. These pitches are presented, and funding is awarded to the most promising pitches, supporting the community while also supporting student development (12). (Goal 1)
 - -The College of Business's Entrepreneurship Bachelor of Science and Venture Master of Business Administration degree programs encourages students to work with local startups and businesses on business and capital plans (13, 14). (Goal 1)
 - -UW's College of Law Practicum pairs students with local companies to address simple legal needs (15). (Goal 1)

- -WIP announced 10 \$25,000 awards in July 2024 to businesses and individuals in the Creative Economy in Wyoming (16). (Goal 1)
- -The CEI has initiated student-facing programs focused on talent and workforce development. Students were connected to principles of innovation through partnership with companies and communities, including Plenty and the City of Laramie. In collaboration with these partners, students learned about and tackled real-world challenges facing Wyoming, applying principles to what they learn about Wyoming's economic and innovation ecosystem (17). (Goal 3)
- -The positive impact of these endeavors is visible in the views of external stakeholders and internal stakeholders, who concluded that workforce development/training and entrepreneurial/innovation support, and prioritizing economic growth, respectively, are areas where UW is doing well (18, 19, 20).
- -All these activities and accomplishments align with the internal and external stakeholder views that UW is strong in its collaboration with business and community leaders, in fostering private-public relationships, and with external stakeholder conversations on comprehensive entrepreneurial training and experiential learning and mentorship (18, 19, 20).

Accomplishment 3. Generating an Ecosystem for Innovation

Cultivating an environment that fosters innovation has been a key focus at the UW and has emerged as a successful cornerstone of the institution. This success is supported by a strong campus culture, leadership, and partnerships highlighted as assets of UW by internal stakeholders. External stakeholder feedback emphasized that one of UW's fortes is in entrepreneurial and innovation support and engaging with economic development initiatives which drive innovation.

A longstanding UW innovation effort is the Wyoming SBIR/STTR initiative (21), which works to connect small businesses and innovators with innovative technologies to federal government research and development funds, through providing statewide outreach through workshops, webinars, and mentoring. Through the SBIR/STTR initiative, innovation opportunities are generated and economic ecosystems are reinvigorated with innovative technologies, ideas, and knowledge. Over the last five years, companies in Wyoming had 78 proposals funded resulting in \$30,637,151.86 in funding (22). (Goal 1)

The Wyoming Community Navigator (SBA-funded) program successfully provided support services to Wyoming businesses in underrepresented/underserved communities; the program received a 2023 WEDA Innovation award (23).

Another innovation driver at UW and in Wyoming was the WIP, an ongoing cooperative economic development effort launched in 2021 that is a partnership between UW, Wyoming Governor's Office, WBC, Wyoming's community colleges, Wyoming Department of Workforce Services, Wyoming Department of Education, and the WCCC (24). WIP is the focal point of efforts by UW's President Seidel and Provost Carman to prioritize community engagement and economic development statewide. WIP implements entrepreneurship, innovation, and business skill programs across the state, such as the Wyoming Outdoor Recreation, Tourism, and Hospitality Initiative (WORTH) (25). WORTH supports Wyoming's second-largest economic sector by developing partnerships with industry and community leaders to provide experiential learning for students, professional development for the workforce, and outreach services to Wyoming's tourism industry. WORTH notably co-hosts the Inter-Tribal Tourism Summit in partnership with the High Plains American Indian Research Institute (HPAIRI), a conference engaging directly with the sovereign nations and inhabitants of the Wind River Indian Reservation, with 27 presenters, 7 presentations, and 80

attendants (26). WIP's priority through these partnerships and initiatives is to develop innovations that build Wyoming's economy and workforce. (Goal 1, 2, and 3)

The OISP symbolizes UW's forward-looking focus on innovation. Formed in January 2024 as a venture between UW and the UWF, it establishes partnerships between the university, industry, and non-industry partners to foster innovation and economic impact. This new office is a vehicle for UW to bolster university-industry collaboration and innovation, speaking to the university's prioritization of economic development and partnerships, and further shaping a campus culture of innovation (27). (Goal 1)

In addition, UW is actively restructuring and refocusing TTO, IMPACT 307, and CEI to be more proactive and responsive to all stakeholders. Each of the above offices is engaged in creating new positions, setting roles and responsibilities, and actively recruiting for those positions: three FTEs in the TTO, two FTEs in IMPACT 307, and one FTE in CEI.

UW's engagement with communities, stakeholders and companies extends beyond the examples presented above. UW is a leader in innovation for major Wyoming industries, including its largest—energy resources.

-UW's Center for Innovation for Flow through Porous Media (COIFPM) (28) this year began a public-private partnership for research aimed at revitalizing legacy oil fields in Campbell, Converse, and Johnson counties, under the Wyoming Gas Injection Initiative (29). Full implementation of the technologies looks ahead to 2026 and the project will extend to 2030 and beyond. COIFPM facilities are unique and the only kind in the world. Small and large local and multinational companies seek to collaborate with the expertise at COIFPM to further their needs. COIFPM has already created successes for companies internationally and will do the same for Wyoming. (Goals 1, 2, and 3)

-In addition to COIFPM, the School of Energy Resources (SER) is a unique resource of expertise. SER is dedicated to energy-driven economic development for the state of Wyoming. Created in 2006, SER enhances the university's energy-related education, research, and outreach (30). SER directs and integrates innovative energy research and academic programs at UW and bridges academics and industry through outreach programs. SER's outreach program furthers engagement with stakeholders - communities, researchers, and industry - helping SER understand the needs of communities as well as potential employers and continually evaluate how to best prepare students; SER's expanding outreach program also informs its research priorities. (Goals 1, 2, and 3)

These exemplars of UW's efforts highlight the breadth and scope of how UW engages with a variety of groups and communities to address community needs and participate in the development of entrepreneurial and innovation ecosystems to address those needs. This engagement occurs across the UW campus through several programs, offices, and units. These efforts have been started by individuals or programs interested in activities to engage the community. The IEP self-study highlighted the synergies that exist at UW and can be better coordinated for an even greater impact.

3. Growth and Improvement Plan

The self-study results (internal survey and external interviews) identified three overarching areas of improvement needed to grow UW's innovation and economic engagement as outlined in Goals 1, 2, and 3 below. Addressing these key goals will enhance UW's ability to impact communities in Wyoming beyond the classroom through community engagement and research translation. Each growth and improvement goal described below has a champion responsible for implementing the goal over the next five years (identified in the table).

Goal 1: Construct and complete the innovation and economic engagement ecosystem.

1.1. Reinvigorate and reimagine the technology transfer, entrepreneurship, and innovation units.

Need: The self-study revealed that a functional and proactive TTO, supportive incubator/ accelerator (IMPACT 307), and training through the CEI are essential for vibrant innovation system; and that these units are not fulfilling that role.

Readiness: TTO, IMPACT 307, and CEI receive significant funding (about \$3M per year). In 2023 UW began restructuring these units to be proactive and responsive to the UW community. Recent hires Arundeep Pradhan, Deputy VP for Research and Innovation, and Robert Macy, Director of CEI have extensive experience in these areas. Recruitment of directors for TTO and IMPACT 307 is underway.

Improvement Plan Activities:

When fully staffed, TTO will have 4.5 FTE (two times more than in the past). UW contracts with APIOiX and CSU-STRATA (Colorado State University's TTO) to provide technology transfer and entrepreneurial training, mentoring, and outreach to ensure a fully functional TTO in 2024. Using the Accelerating Research Translation grant (1) as a catalyst, the TTO will be more proactive in bringing market, industry, and community information to UW researchers and entrepreneurs to result in higher quality disclosures, patent applications, licenses, and startups.

IMPACT 307 lost its focus on technology-based startups. With a new mandate and staff, IMPACT 307 will engage entrepreneurs across UW in the business, legal, and R&D aspects of startups. IMPACT 307, TTO, and CEI will work closely to provide programming, mentoring, and education to UW entrepreneurs. IMPACT 307 will also work with local organizations in communities across Wyoming to provide services and support for technology-based startups.

CEI will launch three innovative programs to increase the innovation and entrepreneurship capacity of UW:

- -An undergraduate innovation and consulting course, in collaboration with the SBDC, in which interdisciplinary undergraduate students work with businesses and non-profits to address their needs.
- -A graduate technology commercialization fellowship program, in collaboration with TTO, in which interdisciplinary teams are paired with university technology startups, and/or patents from the university patent portfolio, to further commercialize these technologies.
- -A master craftsman program, in collaboration with the department of Visual Arts, in which students gain training and hands on skills from ideation to prototype.
- -CEI will increase its collaboration with other UW units, e.g., launching a UW chapter of the Collegiate Entrepreneurship Organization to establish a formal mentoring program for UW entrepreneurs and grow the NSF I-Corps at UW.

1.2. Fully establish and functionalize the Office of Industry and Strategic Partnerships (OISP)

Need: UW has a strong record of industry collaborations, 4-6% of research expenditures, which is comparable to industry-sponsored research at larger universities. However, UW's efforts are concentrated in the energy sector and fragmented in different colleges and schools (UNITE 2024 survey). The self-study revealed that UW needs infrastructure and processes for coordinating corporate engagement to advance its research agenda and to foster student success through industry engagement including internships.

Readiness: In 2023, UW committed significant resources to establish the OISP, a joint effort between UW and the UW Foundation to be more responsive and efficient in developing industry engagements. OISP's goal is to increase industry/partner engagement and deepen relationships with economic, workforce, and educational agencies and organizations resulting in higher numbers of grants, contracts, gifts, and internship opportunities for UW students. OISP serves the needs of all colleges and schools, leveraging their efforts and supporting them in making new connections.

Improvement Plan Activities:

- -OISP will expand from 4 to 6 FTEs in 2025, adding key staff to support partnering with governmental, nongovernmental, and nonprofit entities.
- -Form an OISP campus governance council, comprised of key members from UW to provide crucial ideas and feedback on OISP initiatives.
- -Build a campus shared data community, with a goal toward unified systems and trust across units.
- -Partner with corporate engagement consultant (UNITE) to optimize UW teams and create the framework for industry engagement.

1.3. Establish UW research park and enhance venture capital access.

Need: The self-study identified two critical resource gaps, space and access to capital, that limit growth of startups and early-stage technology-based companies. UW needs to identify and partner with stakeholders to develop and build these resources. This is a high-risk high-impact objective and will require working closely with the UW Board of Trustees for approval.

Readiness: IMPACT 307 facilities are not suitable for startups that need wet lab space or for startups that need to expand. UW executed an MOU with the Western Research Institute in Spring 2024 to house/mentor startups in the energy and minerals sectors. In 2024, UW also collaborated with the Laramie Chamber Business Alliance and WBC, the statewide agency for economic development, to identify space and facilities resulting in two companies (Plenty and Safran Passenger Innovations) moving their R&D activities to UW's Cirrus Sky Technology Park, resulting in over 300 technology jobs in Laramie.

- -Work with city and state agencies to identify opportunities for developing infrastructure at the Cirrus Sky Technology Park where companies can take advantage of UW's research enterprise and access a qualified workforce.
- -Identify and implement strategies to convert vacant wet labs in the UW Bureau of Mines building to create an incubator; develop strategies to raise funds for the conversion (six companies currently leasing space from UW can be moved to the proposed incubator).

-Leverage existing opportunities for startups (SBIR/STTR funding, Gener8tor, Wyoming Venture Capital) to develop and implement a gap funding program for technology development and a seed fund for startups with the UWF and key interested stakeholders.

Goal 2: Enhance the entrepreneurship, innovation, and economic engagement culture at UW

UW will change its culture by providing opportunities, incentives, reducing barriers, and recognizing accomplishments for translational research, entrepreneurship, and economic engagement activities.

2.1. Recognize faculty engagement with research, community, industry, and economic development partnerships

Need: As indicated by the internal survey, there needs to be an alignment of these activities with the reward system (review, promotion, and tenure) internally; and, as per both internal and external stakeholders more efficient processes for industry and faculty to engage.

Readiness: UW has proposed inclusion of community, industry, and economic development activities in the review, promotion, and tenure policies. These new policies are being evaluated and implemented at the college and department levels.

Improvement Plan Activities:

- -Work with the provost, deans, and department chairs in implementing policies that reward faculty economic engagement involvement/contributions. The College of Engineering and Physical Sciences and the Mechanical Engineering department are adopting these new guidelines.
- -Create a database of faculty expertise and make it available to stakeholders.
- -Encourage faculty participation in opportunities related to community, industry, and economic development.
- -Provide translational research funding opportunities for researchers.
- -Improve the service orientation to leverage experts, university departments, and colleges to proactively address issues facing Wyoming communities.

2.2. Streamline processes to reduce barriers for collaborations and partnerships with community, industry, and economic development agencies.

Need: Current processes at UW are perceived as cumbersome and siloed with little communication between offices responsible for implementing and executing collaborations and partnerships. UW has a process for corporate engagement that can be adapted to identify community and other research partners. For example, WCF grants help pay for non-profit employees to take courses toward a master's in public administration.

Readiness: UW has over the last year focused on restructuring TTO and IMPACT 307, creation of the OISP and the RDO, and increased staffing of the Pre-awards office.

- -Assemble task force to identify current issues and processes that create delays in establishing partnerships and collaborations and identify workable solutions.
- -Create and adopt a systematic and phased approach for engaging economic development, research, non-profits, and non-industry strategic partners.

- -Create a "Front Door" for external partners that would guide external partners to the appropriate units, offices, and faculty at UW via a relationship manager i.e., 'concierge'.
- -Streamline procedures for contracts and agreements, faculty-company collaborations, and creating connections between UW, entrepreneurs, and organizations.
- -Identify best practices, metrics for success, training partners, and successful communication process.

2.3. Develop a systematic approach to grow the research enterprise and identify and develop strategic economic development and research partnerships.

Need: Based on internal feedback, there is a need to grow the research enterprise and effective partnering mechanisms. Current UW approaches are siloed with limited focus on translational research.

Readiness: UW established the RDO and has also undertaken an analysis of its research capacity to determine where and how it can grow the research enterprise.

Improvement Plan Activities:

- -Work with department chairs, deans, and UW senior leadership to develop strategies and incentives for growing the research enterprise.
- -Increase awareness of the Research Development Office.
- -Engage more closely with the state Grants Management Office, other state agencies, and universities to address research and workforce development opportunities.
- -Create/Provide opportunities for faculty engagement in economic and community partnerships.

Goal 3: Expand strategic communication and training to maximize innovation and economic engagement awareness.

Goal 3.1. Implement a comprehensive communication and outreach strategy

Need: The self-study indicated a critical state-wide need for a comprehensive communication strategy to disseminate information on success stories, partnerships, connections, innovations, and economic engagement. Internal and external stakeholders also noted difficulty in finding relevant information on the UW website.

Readiness: UW's "World Needs More Cowboys" campaign established UW's presence throughout the state as being responsive to communities. UW is leveraging the relationships established to engage in dialog with communities in Wyoming. Having received the Carnegie Community Engaged Campus designation, UW is prioritizing engagement and outreach through multiple UW units.

- -Develop a high-level task to review the website for gaps and implement strategies to address those gaps resulting in a user-friendly website that enables information access.
- -Explore different marketing channels like YouTube, podcasts, and events to communicate effectively with internal and external stakeholders.
- -Collaborate with regional leaders by utilizing UW's cultural and athletic activities.

-Partner with communities to prioritize public/private partnerships and investments that drive economic growth.

Goal 3.2. Connect continually with the internal and external stakeholders through two-way communications

Need: Self-study showed siloing across campus and between economic development ecosystem partners; and the desire to bolster collaborative efforts that bring key stakeholders for economic engagement and innovation activities together.

Readiness: UW is leveraging existing and longstanding partnerships with community and economic development organizations to build and strengthen its participation via hosting events, like the Wyoming Governor's Business Forum.

Improvement Plan Activities:

- -Improve the economic development ecosystems to create networks to facilitate interactions among key UW personnel and regional economic entities.
 - -Build on the success of hosting the Governor's Business Forum and facilitate more regional and statewide conferences and other events.
 - -Increase participation in events like the Connect2Women conference and others that focus on workforce and economic issues affecting Wyoming.
 - -Highlight UW's research success through an annual event honoring researchers that engage in entrepreneurial and economic development activities.

Goal 3.3. Develop proactive place-based economic development partnerships.

Need: Build systems of trust with rural communities through economic and workforce development partnerships.

Readiness: Leverage UW Extension's relationships with community and local businesses; existing relationships OISP and WIP have with community colleges, local, state, and federal agencies, and organizations; and the work HPAIRI engages with Tribal organizations.

- -Promoting civic discourse through facilitated dialog with communities.
- -Work with extension and rural entrepreneurs to bolster business support services.
- -Engage more with the community colleges to share programing and support their entrepreneurial and innovation ecosystems.
- -Engage more with tribal governments on economic and workforce development initiatives building on current relationships.

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AGENDA ITEM TITLE: Science Initiative Annual Report, Chitnis, Gatlin



SCIENCE INITIATIVE ANNUAL REPORT

2023-24

REVOLUTIONIZING SCIENTIFIC EDUCATION AND DISCOVERY IN WYOMING

The University of Wyoming's Science Initiative & Science Institute enable world-class research and education that will strengthen the foundations of Wyoming's present and future economy. Through integrated, interdisciplinary science, Wyoming's current and future researchers and entrepreneurs will revolutionize areas of Wyoming's economy including mineral extraction, agriculture, tourism, resource management, and emerging technology, while also preserving Wyoming's greatest natural resources and unique biodiversity. The Science Institute & Science Initiative will provide UW students with a flexible, pioneering skill set, giving them the resources to invent a Wyoming future whose details cannot be fully known.



YEAR IN REVIEW

Executive Summary

LEARNING ACTIVELY MENTORING PROGRAM (LAMP)
Transforming Teaching at UW & Across the State

WYOMING RESEARCH SCHOLARS PROGRAM (WRSP)
Research Training & Mentoring for Undergraduate Students

SCIENCE INITIATIVE ROADSHOW

Bringing Active Learning to Wyoming K-12 Schools & Communities

CREATING THE SCIENCE INSTITUTE

Propelling Research Forward from Ideation to Implementation

RESEARCH & EDUCATIONAL FACILITIES UPDATE

Building for the Future

GOALS & METRICS

Measuring What We Value to Become Top-Tier

FINANCIAL STATEMENT
Funding Transformative Experiences







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LETTER FROM THE DIRECTORS

Dear Friends of the Science Initiative,

The University of Wyoming's Science Initiative has demonstrated exceptional impact in advancing STEM education and outreach across the state during the 2023-2024 academic year. Through its signature programs, the Initiative engaged over 5,700 university students in active learning courses, while the Wyoming Research Scholars Program provided 46 talented undergraduates with valuable research opportunities, resulting in multiple peer-reviewed publications and conference presentations. The Initiative's commitment to statewide engagement was exemplified by its Roadshow program, which brought hands-on STEM activities to more than 6,700 K-12 students and seniors across Wyoming communities, while its Learning Actively Mentoring Program continued to transform teaching excellence, with 15 LAMP-trained educators receiving prestigious teaching awards. With full funding now secured through legislative appropriation, the Science Initiative is positioned to continue revolutionizing scientific education and discovery in Wyoming.

The newly established Science Institute marks an exciting expansion of the Initiative's mission, launching 10 innovative research centers and projects focused on strengthening Wyoming's economy through interdisciplinary science. With an initial investment of \$2.375 million in seed funding, these centers and projects have already demonstrated remarkable success. The Institute's state-of-the-art facilities, including the Plant Growth & Phenotyping Facility and the Center for Advanced Scientific Instrumentation, are creating unprecedented opportunities for cutting-edge research, while the award of eight PhD fellowships is helping to build a pipeline of top scientific talent for Wyoming's future. Moving into the future, the Science Institute will continue to facilitate the realization of the Science Initiative's goals and catalyze new scientific discoveries that address Wyoming's needs.

At the heart of these achievements is an extraordinary team whose passion for science and STEM education shines through in everything they do. The amazing work of program directors Rachel Watson, Jamie Crait, Karagh Brummond, and Erin Klauk, who have poured their hearts and souls into creating transformative experiences for students at UW and in communities across the state, is fundamentally transforming the way science is taught and communicated throughout Wyoming. Supported by a fantastic group of dedicated staff members who work tirelessly behind the scenes, their commitment to excellence, innovation, and service continues to elevate STEM education and research at UW and across our great state.

Best Regards,

Mark Lyford

Associate Director of Engagement

Executive Director

ENGAGEMENT



The SI Roadshow brought active learning to

PreK-12 students and senior citizens during

outreach and inreach events in schools and other venues, more than doubling our reach over last year

A grant for

from the Wyoming Department of Health Aging Division, entitled "Engaging the Aging Brain in STEM: Fostering Socialization and Health Promotion in Older Individuals through the Science Initiative Roadshow" will allow the the SI Roadshow to bring engaging science activities to seniors throughout the state.



The Roadshow collaborated with the Engineering Outreach Program, Mobile Makerspace, Science Kitchen, and School of Computing to offer STEM Days at Hanna-Elk Mountain and Saratoga schools. These STEM Days include a plethora of different hands-on activities for students of all ages and expose them to a wide variety of science disciplines and applications.

WYOMING RESEARCH SCHOLARS PROGRAM (WRSP)

WRSP included 46 scholars from 12 US states



WY scholars from

WY counties

WRSP scholars did



WRSP scholars contributed to

articles published in peer-reviewed iournals and contributed to

presentations at professional conferences

"I feel like being part of this program (WRSP) taught me invaluable research skills that I couldn't have gotten without it. It also allowed me to work in 2 labs during my time as an undergrad because I was getting paid and didn't need to hold another job. I deeply appreciate the opportunities WRSP has given me. The skills I learned in this program have made me a better student and worker generally as well." - WRSP alumnus, Psychology

"Being a part of WRSP has allowed me to complete a research project that I am passionate about by giving me the financial means, education, support, and encouragement I needed to succeed!" - WRSP alumnus, Anthropology

LEARNING ACTIVELY MENTORING PROGRAM (LAMP)



The LAMP Fellows program trained

instructors from

WY institutions of higher education

This year, 15 LAMP educators were awarded teaching awards. Some of these included:

UW LAMP Fellow Danny Dale was awarded the **George Duke Humphrey Distinguished Faculty Award.**

UW LAMP Fellows Kayla Burd, Bree Doering. Lori Howe. Joe Russo. & Jon Prather were awarded the

Promoting Intellectual Engagement (PIE Award).

CWC LAMP Fellow Bill Finney was awarded the **CWC** Innovative Educator of the Year Award.

LAMP-trained professors taught

students in UW active

learning courses



CREATION OF THE SCIENCE INSTITUTE

research centers and projects were funded at a total of

This seed funding, along with PhD fellows support, and investment in core facilities, will help stimulate external research funding for projects focused on strengthening diverse sectors of Wyoming's economy and conserving important natural resources.



current UW graduate students were awarded prestigious PhD fellowships for 3 years of graduate studies. These fellows will support research within the Science Institute's centers as well as take part in Science Initiative educational programs. In the future, these fellowships will fund 19 students annually and will be awarded to incoming PhD students. This will help to build a pipeline of top talent to UW, increase the number of graduate degrees UW awards, and enrich our programming for years

to come.

Since late 2023, funded research centers and projects are so far affiliated with projects totaling

in extramural funding, published

peer-reviewed articles, and supported the research of

students and

post-doctoral researchers





LAMP is a comprehensive, sustained mentoring and professional development program with an emphasis on how to best adopt active learning strategies in large-scale active learning classrooms at UW and in classrooms across the state's community colleges.

Program Goals:

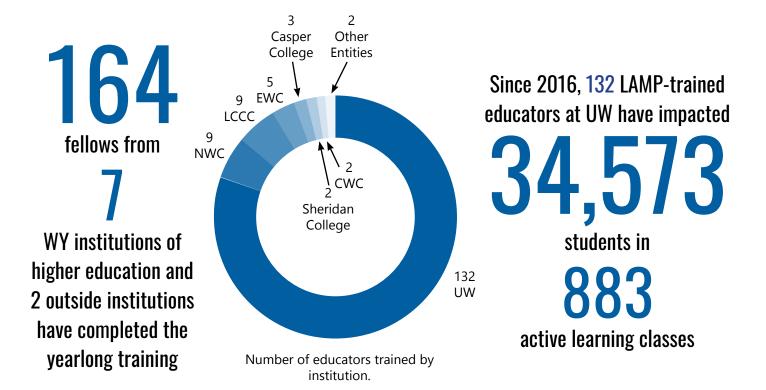
1. Improve student retention, success, and engagement in STEM classrooms.

LAMP

- 2. Enable all new and most existing STEM teaching faculty and teaching assistants at UW to become trained in active learning strategies.
- 3. Conduct research on active learning in STEM classrooms to investigate relationships between teaching practices and student success, literacy, engagement, and inclusion.
- 4. Establish professional development and collaboration opportunities for science instructors across the state, including community college instructors and K-12 teachers, to improve learning experiences for all Wyoming students.

LAMP FELLOWS THROUGH TIME (2016-2024)

The LAMP Fellows Program is an immersive, year-long educational development opportunity designed to facilitate instructors' incorporation of active learning techniques into the STEM courses they teach at UW and at community colleges across the state. The program began in the 2016-2017 academic year and enrolled a new class of educators each year until 2020, when classes began enrolling every other year.



LAMP FELLOWS 2023/2024

During the 2023-2024 academic year, the sixth class of LAMP Fellows implemented and assessed their planned active learning strategies. The educators were supported in their work through four workshops: September – Utilizing Assessment Data to Evolve Instructional Design, October – Mapping your Curriculum onto Inclusive Pedagogical Practices, January – Coming Full Circle to Complete your Teaching and Learning Philosophy, and March – Aligning Values, Outcomes, Pedagogies and Assessments. On May 3rd, the LAMP Fellows presented their final posters detailing their active learning strategies and assessment data. Their projects ranged from *Transitioning Quantitative Chemical Analysis to an Active Learning Class* (Kui Chen, UW) to Immersive Inquiry in Medical Microbiology: A Journey from Curiosity to Accomplishment (Marie Yearling, LCCC).

The 2023-2024 LAMP Fellows class was the most accomplished LAMP class to date. Of the 34 Fellows accepted into the program, 33 completed their final project and earned their LAMP certificate. This is a success rate of 97%. Moreover, a majority (73%) of the LAMP fellows completed an updated teaching philosophy expressing their pedagogical growth. This exceeds even the most successful prior LAMP classes by 36%. We credit the increased success of the LAMP fellows to two factors: 1) We added spring 2023 asynchronous curriculum that allowed fellows to master the basic learning outcomes prior to the Summer Institute, 2) We enhanced our own use of Universal Design for Learning.

HHMI INCLUSIVE EXCELLENCE GRANT UPDATE

In 2023-2024, we published an institutional ethnography for our five community colleges. Our graduate assistant (Rosemary McBride) was able to utilize our institutional ethnography data to perform a qualitative social network analysis depicting the relationships between and amongst our community college and university educators. Our learnings about institutional hierarchies and networks from these research studies have informed our evidence-based development and nurturing of learning communities.

We have nurtured the outcomes of inclusive excellence communities at 3 of our 5 community colleges and will launch at the other two this coming year. Our educators are meeting the outcomes and were able to share their inclusive excellence work at a statewide gathering that we held at LCCC on May 14th.

Our NWC/UW Learning Community continued to assist with the NWC Student Showcase in Powell, now in its second year. This year, 72 students, supported by their faculty mentors, presented research, creative work or innovation.

Based upon our learning at our statewide gathering in May, we have planned a summer mini-retreat and workshops to allow educators to enunciate the relationship between grit, growth mindset, and self-assessment/self-regulation and to use grit and growth mindset as more equitable metrics to select students for opportunities. We will continue biweekly learning community meetings for our launched communities and we will be launching our full learning communities at Casper College and Eastern Wyoming College. We are also researching the impacts of the inclusive excellence learning communities on our members using both quantitative survey data and a qualitative phenomenological study.



In the 2023/2024 academic year, 60 LAMP-trained educators at UW impacted

5,763

165

active learning classes

Student enrollment by discipline in LAMP fellow-taught active learning classrooms, academic year 2023/2024.

DISCIPLINE	ENROLLMENT
Biological Sciences	1,984
Physical Sciences	1,673
Engineering	582
Health Sciences	443
Psychology	231
Mathematics	202
Environment & Natural Resources	178
Honors College	170
Agriculture	148
Social Sciences	97
Disability Studies	38
Education	17

Student enrollment by subject description (including subject descriptions with an enrollment of 10 or more) in LAMP fellow-taught active learning classrooms, academic year 2023/2024.

ENDOLL MENT

OUDIFOT DECODIDATION

SUBJECT DESCRIPTION	ENROLLMENT
Chemistry	1,398
Life Sciences	1,242
Kinesiology	370
Zoology & Physiology	344
Construction Management	309
Microbiology	238
Psychology	231
Mathematics	202
Honors	170
Geospatial Information Science Technology	136
Plant Sciences	99
Environment & Natural Resources	87
Architectural Engineering	87
Speech-Language Pathology	66
Computer Science	65
Earth Systems Science	63
Molecular Biology	62
Botany	62
Anthropology	59
Astronomy	54
Physics	50
Agricultural Economics	49
Electrical Engineering	45
Civil Engineering	39
Wyoming Institute for Disabilities	38
Criminal Justice	32
Pathobiology	28
Outdoor Recreation & Tourism Management	28
Engineering Science	28
Geography	27
Agricultural Education	14

EDUCATOR'S LEARNING COMMUNITY

In the spring of 2024, eight LAMP Fellow graduates were selected as members of the LAMP Educator Learning Community: Cedar Wiseman, Ashleigh Pilkerton, Amy Peterson, Jacob Layer, Kiana Henny, Kayla Burd and Reshmi Singh. These LAMP Fellows are joined by two undergraduate LAMP learning assistants, Dawson Poteet and Jaden Cook. The LAMP ELC is co-led by LAMP Director Rachel Watson and ECTL's Director of Online and Digital Teaching, Christi Boggs. Together the ELC educators are learning about theories of change & resistance, and becoming trained as agents of change, catalyzing increased adoption of active learning in their home departments, units and divisions. Additionally, each member is engaged in an original SoTL (Scholarship of Teaching and Learning) study. Studies range from *Developing a Calculus Concept Inventory for Assessing Problem-Solving Ability* (Cedar Wiseman) to *Team-Based Learning in a Large Course: Preliminary Data in a General Psychology Classroom* (Kayla Burd). All studies have been submitted for peer review and inclusion in the Original Lilly Conference on College Teaching in November in Oxford, Ohio.

LEARNING ASSISTANTS

The LAMP Learning Assistants Program began in Spring 2018 and provides UW students with opportunities to assist teaching in large introductory science courses taught in active learning classrooms at UW. Learning Assistants (LAs) act as peer mentors to help facilitate team-based and other types of learning. As many LAs are pursuing employment as K-12 STEM teachers, the program also integrates active learning into their training and gives them valuable teaching experience. Since Spring of 2018, 147 UW students have served as LAs for 287 active learning courses. This academic year, 44 UW students have been LAs fo 59 active learning courses.

LAMP FELLOWS MAKE BIG IMPACTS AND ARE AWARDED WITH HIGH HONORS

Prior LAMP fellows continue to utilize their training to impact students at UW and across the state, gaining recognition for their transformative contributions. This year, 15 educators from across the state earned teaching awards, listed below:

- Danny Dale (UW Physics & Astronomy) George Duke Humphrey Distinguished Faculty Award
- Kayla Burd (UW Psychology), Bree Doering (UW Anthropology), Lori Howe (Honors College), Joe Russo (School of Teacher Education), Jon Prather (UW Life Sciences) – Promoting Intellectual Engagement (PIE) Award
- Randa Jabbour (UW Plant Sciences) Mortar Board Top Prof, Mid-Career Graduate Faculty Mentoring Award
- Chris North (UW Botany and Life Sciences), Amy Navratil (UW Zoology & Physiology) College of Agriculture, Life Sciences & Natural Resources Outstanding Educator Award
- Corrine Knapp (UW Haub School of ENR) Outstanding Graduate Mentor Award
- Amy Peterson (UW Communication Disorders) Honors College Capstone Mentor of the Year
- **Michelle Blakely** (UW Pharmacy) American Association of Colleges of Pharmacy (AACP) UW Faculty Member of the Year, UW Alpha Nu of Phi Lambda Sigma Faculty Member of the Year
- **Ahmed Abdelaty Ahmed** (UW Civil & Architectural Engineering & Construction Management) Associate Schools of Construction (ASC) Regional Teaching Award
- **Ali Baas** (ACSD1) 23-24 Whiting High School Teacher of the Year (Laramie)
- Bill Finney (CWC Chemistry and Physics) CWC Innovative Educator of the Year Award



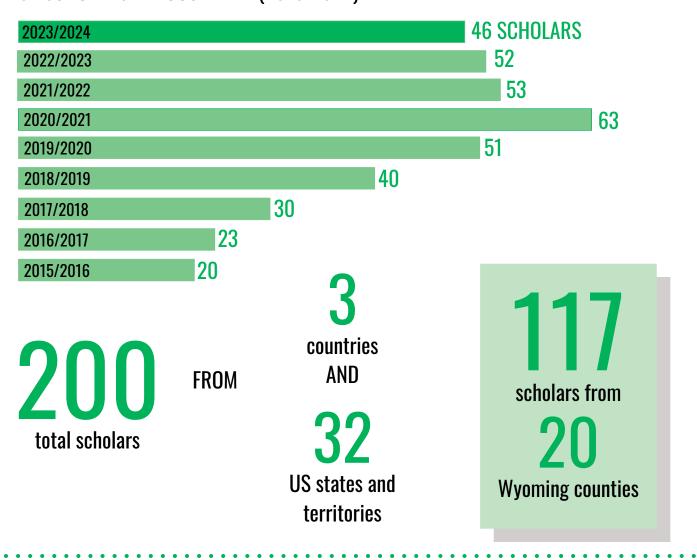


The **Wyoming Research Scholars Program (WRSP)** pairs undergraduate students with faculty mentors to participate in their own cutting-edge research project starting as early as their freshman year. Research experiences through WRSP build confidence and competence in young scholars at a formative stage in their training.

Program Goals:

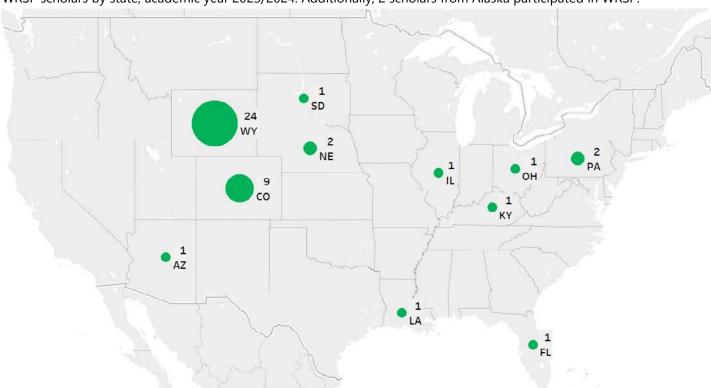
- 1. Attract high-achieving high school graduates and community college transfer students to UW.
- 2. Retain promising students in the sciences at UW through early involvement in hands-on science research, department seminars, and public outreach events.
- 3. Pair talented students with a faculty mentor who can model the scholarship, teaching, service, and outreach activities of a professional scientist.
- 4. Develop transferable professional skills such as science writing, data analysis, and oral communication through participation in research and public outreach events.

WRSP SCHOLARS THROUGH TIME (2015-2024)

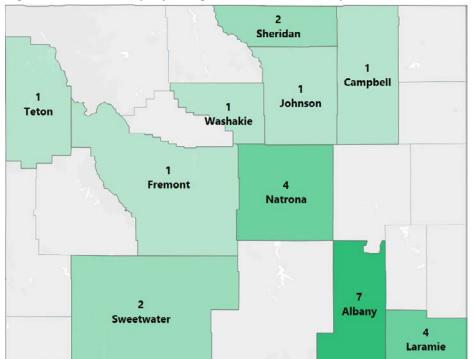


WRSP SCHOLARS 2023/2024

WRSP scholars by state, academic year 2023/2024. Additionally, 2 scholars from Alaska participated in WRSP.



Below: WRSP scholars by Wyoming county, academic year 2023/2024. Right: WRSP scholars by Wyoming hometown, academic year 2023/2024.



WY CITY	# OF SCHOLARS
Buffalo	1
Buford	1
Casper	4
Cheyenne	3
Gillette	1
Granite Canyon	1
Jackson	1
Lander	1
Laramie	6
Rock Springs	2
Sheridan	2
Ten Sleep	1

WRSP scholars did

WRSP

12,388 hours of research

10 WRSP scholars were named as authors on 13 published articles, and scholars gave 24 presentations at professional conferences

Most common primary majors of WRSP scholars, academic year 2023/2024.

PRIMARY MAJOR	# OF SCHOLARS
Molecular Biology	8
Zoology	7
Environmental Systems Science	4
Wildlife & Fisheries Biology & Management	3
Chemistry	3
Anthropology	3
Psychology	2
Physiology	2
Physics	2
Mechanical Engineering	2
Geology	2

WRSP SCHOLAR EXIT SURVEY

Each semester, scholars who complete their fellowship with the WRSP (most by graduating) fill out an exit survey which asks questions about learning outcomes related to their WRSP research and outreach. Also included are questions about future educational and employment plans and questions about WRSP in general. Below are some notable results from the 14 Spring 2024 graduates who completed the survey.

On average, scholars reported a

GREAT GAIN

related to their

- Understanding of the overall process of research
- Ability to communicate and present research and scientific findings
- Confidence in ability to do research
- Comfort in discussing scientific concepts

9.4
average overall rating of the program

Scholars reported that

STRENGTHS

of the program include

- Trainings on science communication
- Resources to attend professional conferences
- Flexibility of the program
- Paid experience so they were more able to focus on coursework and research

WRSP was definitely one of the highlights of my undergraduate experience. While I learned the fundamentals behind molecular biology in my classes, exposure to these theories and techniques in practice in a laboratory setting prepared me for a future career in the field more than any one course I took. Helping with ongoing research also made me feel like I was really contributing to something greater during my undergraduate years, so I definitely appreciated that.

WRSP ALUMNI SURVEY

In the fall of the years 2020, 2021, 2022, and 2023 we sent a survey to all alumni of the WRSP that asked questions about alumni's current employment and education status and any comments they had on how WRSP affected their research, education, and employment journey. Below is a summary of the data.

- 93 out of 154 total alumni responded (60% response rate)
- In total, respondents were from 21 states and territories. 57 of the 93 alumni respondents were from Wyoming (61% of total respondents), and 13 were from Colorado (13% of total respondents)
- Wyoming alumni were from 25 different hometowns 12 respondents from Cheyenne, 11 from Laramie, 4 from Casper, and 3 from Sheridan and Rawlins each.
- 11 out of 57 alumni originally from Wyoming stayed in Wyoming after finishing WRSP (this excluded students that are still pursuing their bachelor's at UW and exited WRSP before graduating). It is possible that WY students that left the state for graduate school may return, as well. 7 alumni originally from other states stayed in Wyoming after finishing WRSP.
- 56 alumni attended or are currently attending graduate school (60% of total respondents). 26 alumni pursued Masters degrees, 20 pursued PhDs, and 10 pursued other advanced degrees (such as JDs or MDs). 12 of these alumni attended UW for their advanced degree (21% of total alumni that pursued an advanced degree).
- Of respondents that included employment information:
 - + 17 were employed in private industry related to STEM
 - + 17 were employed in a STEM academic field (higher education)
 - + 2 were STEM K-12 teachers
 - + 4 worked in a non-STEM field, and
 - + 1 started a non-STEM-related business
- When asked how the WRSP has helped them to achieve their goals, respondents said the following were important:
- WRSP helped them develop crucial skills in research, leadership, general professional skills (like resume building and applying to jobs), as well as speaking and communication
 - + WRSP helped them get into graduate school
 - + WRSP helped them attain employment
 - + WRSP helped them make connections with other researchers and develop a sense of belonging
 - + WRSP made research accessible through being paid to do research and being given resources to travel for research and professional conferences

COURSE-BASED UNDERGRADUATE RESEARCH EXPERIENCES (CURES)

Instructors Jamie Crait and Christopher North continue to teach the LIFE 1101 CURE, engaging students in research in beaver pond ecosystems in the Medicine Bow National Forest. With the completion of the Student Collaborative Research, Outreach, and Learning Laboratory on the 4th floor of the Science Initiative Building in late fall of 2024, we look forward to build out CURE courses even further with the use of this groundbreaking space, as well as support from a dedicated laboratory manager. We continue to work with faculty across campus to imagine CURE course sequences across the disciplines, as well.





Teams of undergraduate and graduate students from UW, along with UW and WY community college faculty and staff, in collaboration with partners across the state, facilitate in-person and virtual learning in PreK-12 classrooms and senior communities across the state using active learning techniques through the **Science Initiative Roadshow**. In K-12 classrooms, the teams from UW work with teachers to integrate learning experiences into existing curricula in order to achieve assigned learning outcomes. This collaborative approach exposes Wyoming students, teachers, and community members to innovative active learning techniques and creates links between UW and schools across the state to improve STEM teaching statewide.

THE SCIENCE INITIATIVE ROADSHOW THROUGH TIME (2017-2024)

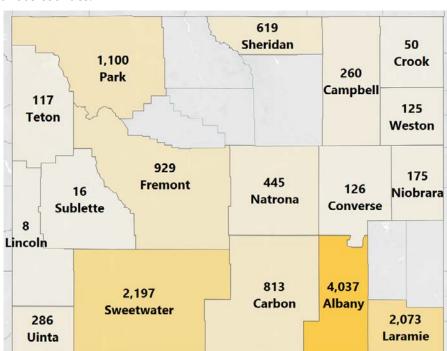
Number of PreK-12 students and seniors reached, 2017-2024. Students who took part in some in-reaches may not be included in the map as they came from various counties.

Since 2017, the Science Initiative Roadshow has brought active learning to

14,763

K-12 students & seniors from

Wyoming counties



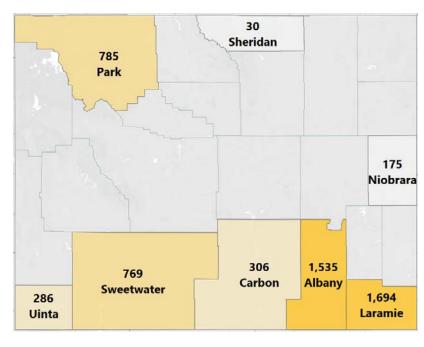
outreach & inreach events

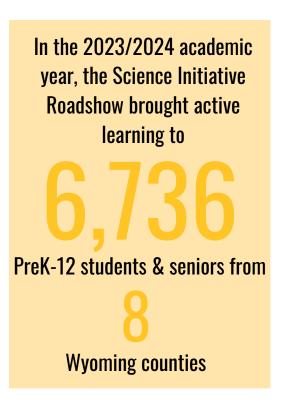
55+
schools & afterschool
programs

25
WY communities

THE SCIENCE INITIATIVE ROADSHOW 2023/2024

Number of PreK-12 students and seniors reached, academic year 2023/2024. Students who took part in some in-reaches may not be included in the map as they came from various counties.





During academic year 2023/2024, the SI Roadshow led educational activities during 37 separate programs. Schools or other programs served were (by county):

Albany – Annual STEM Carnival, WY Latina Youth Conference, inreach visits, ECEC Pre-K, Spring Creek Elementary, Linford Elementary, Beitel Elementary, UW Lab School, Snowy Range Academy, Laramie Middle School, Laramie High School

Carbon – Encampment K-12 School, H-E-M Junior/Senior High School

Laramie – Discovery Days event (served many schools throughout Cheyenne), Girl Scouts Day of Science, Dildine Elementary, Miller Elementary

Niobrara – Eastern Wyoming Nature Center (for K-12 students in Lusk)

Park – All preschools in Cody, Livingston Elementary School

Sheridan – The Hub on Smith (senior community in Sheridan)

Sweetwater – Girls in STEM Saturday in Green River, Desert View Elementary, Truman Elementary, Rock Springs High School

Uinta – Aspen Elementary



THIS YEAR IN THE ROADSHOW

This past year the Science Initiative Roadshow and Community Engagement Program was all across Wyoming bringing hands-on STEM activities to K-12 classrooms, preschools, and even to older adult senior centers. The program reached 6,736 individuals in the state, traveling to locations including but not limited to Cody, Rock Springs, Encampment, Hanna, Green River, Evanston, Lusk, and Sheridan. The Roadshow reached new counties in the state this past year, closing the gap to only 6 counties the Roadshow has yet to visit in Wyoming. Many elementary schools had the Roadshow host STEM Days, where students were able to rotate through 10-12 different STEM stations throughout the day, learning concepts from Geology to Anatomy, Physics, Chemistry, and more. Partnerships with external and internal programs such as the Wyoming Game & Fish Department and UW Science Kitchen were instrumental in making these STEM Days a success! Finally, the Roadshow is excited to be adding visits to older adult-serving facilities in Wyoming, where we have facilitated 1-2 hour hands-on workshops including activities on pollination and geology.

GRANTS AND DONATIONS BRING THE ROADSHOW TO NEW PEOPLE AND PLACES

The Roadshow was recently awarded a grant from the Wyoming Department of Health's Aging Division to expand their hands-on STEM activities and lessons into older adult-serving locations in the state. The grant is focused on increasing socialization and engagement in older individuals by offering hands-on, science-based activities that are focused on topics and learning opportunities of interest to this demographic. In addition, the Roadshow delivers these activities with UW students, both undergraduate and graduate, allowing older individuals the chance to engage in socialization with younger individuals that come from many of the same rural towns in Wyoming. When possible, the Roadshow also looks to incorporate cross-generational opportunities, bringing K-12 students and older individuals together to perform these STEM activities.

The Roadshow was also awarded a generous donation from Williams Technologies to continue their K-12 outreach work in Wyoming communities - specifically those located in Sweetwater, Sublette, Uinta, and Lincoln counties. The Roadshow had an extremely successful spring delivering STEM Days and classroom visits in many of these locations and looks forward to even more scheduled events in fall of 2024. The Roadshow also received generous donations from Rocky Mountain Power and Dominion Energy to foster statewide K-12 partnerships that continue to help us build sustained networks in Wyoming.

SECOND ANNUAL STEM CARNIVAL

The 2nd annual UW STEM Carnival on September 8, 2023 was a huge success, bringing about 1,150 individuals to the UW campus to explore and learn STEM. Of these attendees, we had about 650 K-12 students attend from the local community as well as Goshen and Carbon counties. The carnival featured 42 interactive STEM tables highlighting the STEM programs on UW's campus. In addition to the tables, the carnival specifically featured the UW Engineering Education and Research Building where participants could get an up-close view of the laboratories inside the facility including the Drilling Simulator, Cybersecurity Lab, Driving Simulator, Innovation Wyrkshop, Hydrocarbon Lab, Artificial Intelligence Lab, and the Water Quality Lab. Additional activities also included the UW Geology Museum and UW Planetarium. The Science Initiative is excited to continue to partner with the UW President's Office to offer this highly beloved community event and looks forward to the 3rd annual UW STEM Carnival on Friday, September 6th, 2024 featuring the UW Statewide Agricultural Research and Extension Centers.

STEM CARNIVAL GALLERY





CREATING THE SCIENCE INSTITUTE

INTRODUCTION

In 2023, the Research and Economic Development Division (REDD) established the Science Institute, which is responsible for implementing Science Initiative as well as other STEM research and outreach activities. The Science Institute will also manage the Science Initiative and its programs, instrumentation, and plant and animal facilities. As a part of its focused strategy to develop Wyoming-relevant and nationally competitive expertise, it developed interdisciplinary research centers to address specific areas of relevance to Wyoming and UW, awarding seed grants to launch these centers, and awarding fellowships to PhD students to conduct research in these centers. In doing so, the Science Institute continues to further the research mission of the university, providing support to help drive the core sciences to top-tier status and invigorate the state's economy in crucial areas.

IDEATION

In the fall of 2023, REDD put out a call to researchers at UW to participate in a 3-day Center Ideation Jumpstart Event, which took place October 23-25, 2023. 96 UW faculty members from 30 departments across campus applied to be a part of the ideation event. Selected faculty members were invited to the event, where mentor faculty members led directed conversations in which participants thought critically about new ideas for transdisciplinary research that would benefit Wyoming. Participants did not come to this ideation event with pre-determined research center teams or ideas – the purpose of the event was to create these ideas in real time. During the ideation event, ideas for research centers were formed among a group of scientists spanning across disciplines. Approximately one month after the ideation event, faculty teams (including external collaborators from Wyoming community colleges and other institutions across the country), submitted their proposals for consideration. These proposals included information about how the research would impact Wyoming's future and that of UW, how the project would build on UW research strengths and on Science Initiative education and outreach programs, and how faculty planned to continue to fund the project through extramural funding after Science Institute funds were used.

IMPLEMENTATION

Following the ideation event and review of proposals, funds from the Science Institute have been disbursed to fund 10 different research centers and projects. Funding for centers is \$300,000, spread over 3 fiscal years. Funding for other projects is \$100,000 spread over 2 fiscal years. Two of these projects have differing funding amounts from the above. A description of each center or project follows. It is important to note that information regarding the start and end date and the funding amount only refer to funds disbursed by the Science Institute. These centers and projects were chosen to be funded based on many factors, including their potential for financial sustainability into the future after Science Institute funds are spent, meaning centers and programs will be seeking extramural funding to continue their research.

CENTERS

Center for Wildlife, Technology & Computing – WyldTech

uwyo.edu/science-initiative/wyld-tech

Start & End Date – 1/1/2024 – 6/30/2026

PI Name & Department - Michael Dillon - Zoology & Physiology, Program in Ecology & Evolution Funding Amount - \$300,000

Description – WyldTech's vision is to leverage new technologies, big data, and computational advances to understand and conserve Wyoming's wildlife on working and changing landscapes.

Center for Energy Materials

Start & End Date - 1/1/2024 - 6/30/2026

PI Name & Department - John Hoberg - Chemistry

Funding Amount - \$300,000

Description – The Center for Energy Materials will add value to Wyoming resources by developing advanced technologies for rare earth element extraction (REE) and separation, creation of REE-based permanent magnets, and REE-based catalysts, helping to diversify Wyoming's economy.

Center for Quantum Information Science & Engineering – QISE

Start & End Date – 12/1/2023 – 6/30/2026

PI Name & Department - Jifa Tian - Physics & Astronomy

Funding Amount - \$300,000

Description - QISE will advance technological components of quantum sciences and computing, and also positively impact material science and engineering as well. QISE is also developing education programs at both the undergraduate and graduate levels, helping create a workforce in the QISE field at UW and across the state.

Center for Controlled Environment Agriculture - CEA

uwyo.edu/research/si/centers/cea

Start & End Date – 10/1/2023 -6/30/2026

PI Name & Department - Liping Wang - Civil & Architectural Engineering & Construction Management Funding Amount - \$300,000

Description - Controlled Environment Agriculture (CEA) is a technologically advanced and intensive form of agriculture where plants grow within a controlled, enclosed environment to optimize horticultural practices. It includes several indoor farming styles from single-level greenhouses to more compact vertical farming. CEA can produce a high yield of crops per unit area all year round, creating a resilient and robust supply chain for fresh produce to build nutrition security in remote areas. CEA will support research and education in the field, generate a skilled workforce, build out training and applied learning for faculty, teachers, and students, and upgrade facilities at UW and partner community college campuses.

Center for Rural Community Resilience & Innovation

Start & End Date – 7/1/2024 – 6/30/2027

PI Name & Department - Jeff Hamerlinck - Wyoming Geographic Information Science Center

Funding Amount - \$675,000

Description – The Rural Community Resilience & Innovation project utilizes modeling and socio-technical approaches to establish a framework for understanding and addressing problems faced by rural communities over the next century. This research will lay a foundation for Wyoming to anticipate future scenarios and help communities prepare for a resilient and inclusive future. The project will also create modular lesson plans to engage rural youth in technological advances.

CREATING THE SCIENCE INSTITUTE

PROJECTS

Innovations in Ranching

Start & End Date – 1/1/2024 – 6/30/2025

PI Name & Department - Dana Dittoe - Animal Science

Funding Amount - \$100,000

Description – The Innovations in Ranching project will develop a real-time monitoring biomarker sensor (collar) to continuously track livestock health and production remotely, with the aim to improve herd health, production, and food safety.

Advanced Carbon Valorization

Start & End Date – 1/1/2024 – 6/30/2025

PI Name & Department - Maohong Fan - Energy & Petroleum Engineering

Funding Amount - \$100,000

Description - Carbon sequestration has been used to help stem the tide of climate change, but can be very expensive. The Advanced Carbon Valorization project seeks to create a way to utilize captured carbon dioxide for the generation of value-added products. The team would develop a carbon-neutral system for converting CO2 to ethylene (C2H4), an important compound in the production of many widely-used chemicals, therefore turning an expensive process into a revenue-generating one.

Living Materials

Start & End Date – 1/1/2024 – 6/30/2025

PI Name & Department - John Oakey - Chemical & Biomedical Engineering

Funding Amount - \$100,000

Description – The Living Materials project seeks to develop living materials, drawing upon nature for inspiration, to replace complex and inefficient practices in agriculture and construction. Three research areas, working in coordination, will help to develop materials to perform carbon sequestration and create plant growth substrates.

Earth Bench – Large-scale perturbation experiments in the Earth system

Start & End Date – 1/1/2024 – 6/30/2025

PI Name & Department - Daniel McCoy - Atmospheric Science

Funding Amount - \$100,000

Description - There is considerable uncertainty regarding the magnitude of regional and global environmental change that is currently predicted. The Earth Bench project would advance understanding of the sources of uncertainty in environmental change, enabling communities to prepare for it while also providing avenues for understanding mitigation efficacy.

Community Oriented Research & Policy

Start & End Date – 7/1/2024 – 6/30/2025

PI Name & Department - Jean Garrison – Politics, Public Affairs & International Studies

Funding Amount - \$100,000

Description – The Community Oriented Research & Policy project seeks to create a Center for Public Policy where experts in science, technology, and society can incorporate community stakeholders into policy-relevant research. The center would integrate community voices in all phases of policy-relevant research, flipping from a model that imposes new ideas in science and technology onto the state to a model that incorporates community stakeholders from the outset.

OUTCOMES FROM SCIENCE INSTITUTE CENTERS AND PROJECTS SO FAR

As of July 2024, Science Institute- and REDD-funded centers and projects have

- become affiliated with projects totaling ~\$39M in extramural grant funding,
- published 40 peer-reviewed articles,
- · given 28 presentations at professional conferences,
- and supported the work and research of 23 undergraduate students, 45 graduate students, and 6 post-doctoral researchers.

PHD FELLOWSHIPS

The Science Institute has begun to award PhD fellowships to current UW graduate students. The fellowships will attract high-quality graduate students to UW, increase the number and quality of PhD students graduating from UW, train the next generation of leading scientists, and help stimulate an increase in successful research grant proposals from UW's researchers (with a special emphasis on Science Institute-funded centers). This year, 8 fellowships were awarded to students, for a duration of 3 years. These students will receive training in and assist with research in Science Institute-funded Centers. In the future, a total of 19 graduate students at a time will benefit from ongoing funding of these fellowships, and fellowships will be awarded to incoming students. These fellows will also support research in future Science Institute-funded centers. Their fellowships will also be enriched by participation in Science Initiative programming, giving them access to invaluable training in teaching, research mentorship, and outreach. For this first cohort of 8 fellows, LAMP Director Rachel Watson has created a learning community.

SHARED RESOURCE RESEARCH FACILITY UPDATE

The Science Initiative Building currently houses two shared resource research facilities: The Plant Growth & Phenotyping Facility (PGPF, which includes the rooftop greenhouses and other facilities on the 5th floor) and the Center for Advanced Scientific Instrumentation (CASI, spread throughout the building). In early 2025, a third shared facility, MORF (Model Organism Research Facility) will be finished, as well. These facilities are centralized, shared research resources that provide access to instruments, technologies, services, and expert consultation and training to researchers. Both CASI and PGPF are set up to both serve and train UW researchers from all across campus, as well as researchers from outside institutions and organizations. Users pay for time on instruments, space used, and training, making centers financially sustainable for years to come.

THE PLANT GROWTH & PHENOTYPING FACILITY (PGPF)

The Plant Growth and Phenotyping Facility includes a sprawling 6,400-square-foot complex of Research Greenhouses (with a total of 12 different bays) and an adjacent Research Penthouse housing two spacious walk-in chambers and a range of laboratory spaces meant to support the activities of all users. The research spaces are equipped with state-of-the-art technologies to provide tight environmental controls for plant growth and additional phenotyping applications.

This academic year, personnel hired include:

- Carmela Rosaria Guadagno Director, as well as being the Associate Director of the Center for Controlled Environment Agriculture (CEA)
- Michael Baldwin Facility Manager, as well as being a Specialist for the CEA

UW research teams, both funded by the National Science Foundation, are using resources at the PGPF for research:

- Dr. Eunsook Park and her team are studying molecular and cellular mechanisms in fungal-plant interactions.
- Dr. Carmela Rosaria Guadagno and her team are growing a panel of different genotypes of cotton to dissect the mechanistic underpinnings of water dynamics under drought to inform productivity models.

THE CENTER FOR ADVANCED SCIENTIFIC INSTRUMENTATION (CASI)

CASI is a staffed facility that houses state-of-the-art instrumentation that enables analyses of a diverse range of specimens. Vibration and light-sensitive instrumentation, including several confocal light microscopes, TEM and FIB-SEM electron microscopes, and a micro-CT are housed in spaces on the 1st floor of the SIB. These rooms are designed to minimize vibrations and are electromagnetically shielded, ensuring high-quality imaging. Instruments that are less sensitive to vibration are housed in the CASI showcase and can be found on the third floor of the SIB, and currently features a single crystal X-ray diffractometer (XRD).

Personnel in CASI include:

- Jay Gatlin has been serving as the Interim Director of CASI, but as of his hiring as the Science Institute Director, we will be searching for a full-time director for CASI.
- Qian Yang is serving as Assistant Research Scientist for CASI, overseeing technician work for electron microscopes.
- Tim Deibert is serving as a Research Technician for light microscopes on an hourly basis temporarily. After hiring a permanent director, CASI will strategize hiring needs for another permanent technician, as well.

Highlights of CASI's usage include:

- In the last year, with the successful installation of three new major instruments, CASI now operates seven fully functional major instruments. These instruments have seen high demand, with a total of 4,685 hours of booked usage. The center currently serves 45 research groups and 136 registered users.
- CASI hosted two electron microscope operation classes this fall, enrolling 30 students, as well as five advanced electron microscopy operation workshops, with a combined attendance of 33 participants. Following the introduction of a fee-for-usage/service model in July, CASI generated \$21,816.34 in revenue by the end of September.
- CASI-supported research projects, totaling 31, span federal, state, and internal grants. This activity has already contributed to 13 publications (as reported to us). Further, CASI engaged in five outreach presentations to other UW departments, fostering broader awareness of our capabilities. Three large group lab tours were also conducted, reaching Wyoming community colleges, high school students, and out-of-state graduate students.
- Finally, CASI submitted one NIH grant proposal and ongoing efforts for two additional submissions.



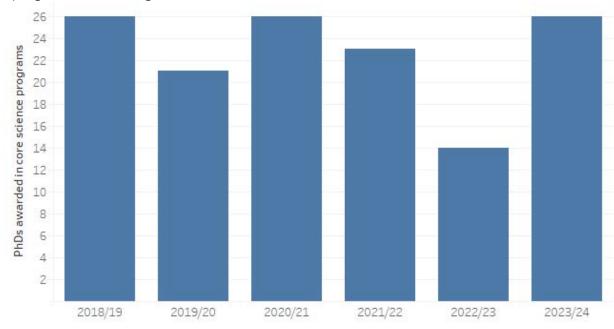
GOALS & METRICS

At the outset of the Science Initiative, the Governor's Task Force agreed upon 7 guiding metrics for assessing the impacts of programming related to student outcomes and success, science teaching, and research funding and productivity. These foundational metrics were formulated to collectively lead the UW core sciences into the top quartile of its competitor institutions, and are relevant to the full implementation of both Phases I and II as outlined in the Governor's Task Force Report. The Science Initiative has recently passed from Phase I to Phase II, so baselines for measuring metric data have been established. As implementation of Phase II continues, changes from the baseline can be measured. Also, as priorities and goals for the university as a whole take shape, appropriate peer institutions will be selected to measure overall competitiveness of the core sciences at UW. The below will outline assessment for select key metrics, most affected by our most recent budget increase to full funding.

METRIC 4

Increase the number of doctoral students graduated in each Science Initiative department by 25% after full implementation of the Science Initiative.

With the creation of the Science Institute, funding has been allocated to 19 PhD fellowships to increase enrollment and degrees awarded in core science departments. This funding will help significantly in helping SI academic programs reach this goal.



In the last 6 academic years, an average of 23 PhD candidates have graduated from UW core science departments (including graduates of the following programs: Molecular Biology, Physics, Botany, Chemistry, Molecular & Cellular Life Sciences, Program in Ecology & Evolution, Hydrologic Sciences, and Neuroscience). This number has held fairly steady, except for academic year 2022-2023, but numbers for 2023-2024 returned to above average. We expect to see the number of PhDs awarded in these departments increase as PhD fellows begin to graduate in the coming years.

In the 6-year period above, PhD degrees awarded by SI core science departments have accounted for 26% of the total PhDs awarded at UW, and 10% of the total doctorate degrees awarded at UW (this includes PhDs, EdDs, DNPs, JDs, and PharmDs).

METRIC 3

Increase the 5-year undergraduate graduation rates for core science majors by 100% after full implementation of the Science Initiative.

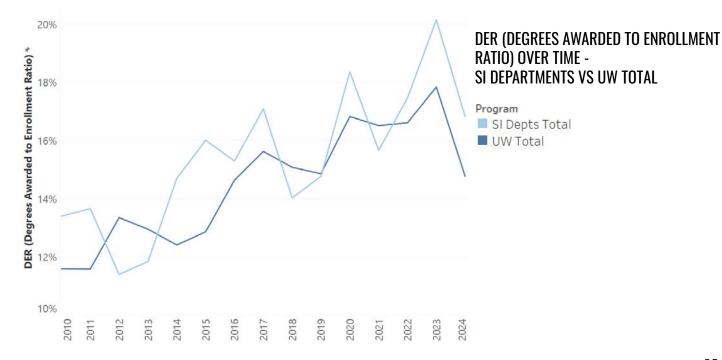
One of the Science Initiative's main goals is to attract, retain, and award degrees to undergraduate students in what have been identified as core science departments and programs at UW, which include Botany, Chemistry, Life Sciences, Microbiology, Molecular Biology, Physics & Astronomy, and Zoology & Physiology. These departments and programs include the following majors: Astronomy & Astrophysics, Biology, Botany, Chemistry, Microbiology, Molecular Biology, Physics, Physiology, Wildlife & Fisheries Biology & Management, and Zoology (Zoology & Physiology were previously one integrated major, but are now split into two).

Two years ago we provided an analysis of enrollment trends for these core science departments and for UW as a whole. Enrollment for UW undergraduate programs continues to decrease since a high point in 2013, but has slowed down since 2021 and 2022. Core science program enrollment has also decreased during this time, but absolute numbers of students have not decreased as much as total undergraduate enrollment. With these decreases in enrollment, we expect to see a delayed decrease in the number of degrees awarded.

UNDERGRADUATE ENROLLMENT - SI DEPARTMENTS VS UW TOTAL

Program	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
SI Depts Total	627	681	737	794	789	781	778	808	827	894	877	811	796	690	660
UW Total	9,523	9,643	9,708	9,730	9,590	9,604	9,519	9,237	9,307	9,322	9,197	8,534	8,093	7,961	7,708

The silver lining is that a general upward trend in Degree to Enrollment ratio (DER) continues over time. DER for SI department programs is approaching 20%, with the average of the last 3 years being 18%, and for total UW undergraduate programs 17%. This metric shows that the last decade has seen a marked increase in undergraduate student success through degree completion at UW and in SI academic programs.



GOALS & METRICS

METRIC 6

Increase dollar value of grants and contracts by 25% indexed to federal research funding levels after full implementation.

Funding for centers and projects from the Science Institute for research and PhD fellows, in conjunction with core facilities, such as the Science Initiative Building (including CASI, rooftop greenhouses, etc.) and others planned for the future (renovated spaces and the proposed new observatory on Jelm Mountain) are expected to augment research collaboration and capacity in STEM fields and contribute to increases in grant funding, as well.

For the purposes of this data, the university fiscal year was used, which begins in July and ends in June of the following year (so FY 2024 spans from July 1, 2023 to June 31, 2024). Originally, the Science Initiative focused mainly on those defined as the core sciences, including the departments of Botany, Chemistry, Molecular Biology, Physics & Astronomy, and Zoology & Physiology. As time has gone on, however, programs within the Science Initiative and Science Institute have gained capacity to support a larger diversity of STEM programs across campus (while continuing to serve core science departments). Therefore, grant funding numbers for all STEM programs and the original SI core science programs can be found in the table below.

As large-scale 4-5 year programs phase in and out, amounts within certain programs may fluctuate, but the general trend seen is an increase in funding over the period from FY 2019 - 2024. During this time STEM programs at UW have seen a 59% increase in funding, while original SI core science programs have seen a 26% increase in funding (although there was a pronounced spike in FY 2023 for SI core science programs).

Grant funding for STEM programs and SI research program by university fiscal year.

PROGRAM Segment	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
All STEM programs	\$80,507,889	\$91,883,645	\$119,210,945	\$99,864,216	\$103,112.096	\$127,850,273
Original SI programs	\$12,354,955	\$12,277,234	\$16,089,787	\$16,354,940	\$19,978,332	\$15,538,707

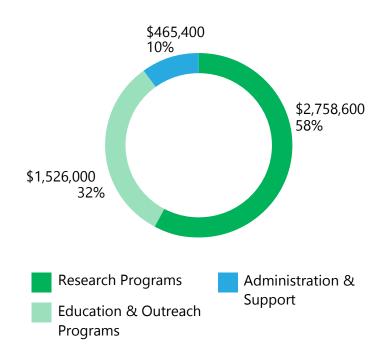


FINANCIAL STATEMENT

THE PAST YEAR

Our financial goals for the year focused on utilizing the fully-funded Science Initiative programmatic budget following the Wyoming Legislature approving an increase to \$4.75M per year in annual support. We were able to increase direct student support by hiring additional undergraduate learning assistants for active learning classrooms and awarding the first cohort of Science Initiative PhD Fellowships. The additional funding also allowed us to kick-start seed funding for competitive external project proposals by awarding 3-year seed funding support to four new research centers and 2-year seed grants to four projects. The additional funding, along with completion of major scientific equipment purchases through Phase 1 of the Wyoming Innovation Partnership, allowed us to open two new shared instrumentation facilities this year. Both facilities are fully operational and have started training users, granting user access, and generating revenue to offset operational costs.

BUDGET BREAKDOWN BY FUNCTION



Fiscal year 2024 budget and fiscal year 2025 proposed budget for the Science Initiative.

BUDGET SEGMENT	TOTAL ANNUAL BUDGET	% OF Funding
Learning Actively Mentoring Program (LAMP)	\$400,000	8%
Wyoming Research Scholars Program (WRSP)	\$900,000	19%
Outreach and Engagement (SI Roadshow)	\$226,000	5%
Graduate Fellows Program	\$932,600	20%
Innovative Seed Grant Program	\$600,000	13%
Research & Core Facilities Support ¹	\$1,226,000	26%
Program Administration & Support	\$465,400	10%
Totals	\$4,750,000	100%

¹Includes dues for CASI service contracts and purchase/repair funds, CASI staffing, greenhouse staffing, and vivarium staffing, etc.

DONATIONS, GIFTS, & GRANTS

Through external gifts and grants, the Science Initiative and Science Institute have been able to expand the reach of their programming to new areas and populations within the state, strengthening existing programs to enrich student learning and success, research, and outreach.

Active external grants for the Science Initiative and Science Institute.

PROJECT NAME	FUNDING SOURCE	PROJECT FUNDING AMOUNT	DURATION OF FUNDING
IMPACT STEM Transfer: Inclusive and Meaningful Partnerships for Cultivating Transformation in STEM Transfer	Howard Hughes Medical Institute (HHMI)	\$883,668	11/1/2022 - 10/31/2028
WIP Phase II: Controlled Environmental Agriculture Industry Program (CEA)	Wyoming Governor's Office	\$600,200	9/29/2023 - 6/30/2025
Engaging the Aging Brain in STEM: Fostering Socialization and Health Promotion in Older Individuals through the Science Initiative Roadshow	Wyoming Department of Health	\$37,348	3/21/2024 - 9/30/2025
Total Funding		\$1,521,216	

Donations and gifts totaled \$36,375 for FY 24, with 92% going to the SI Roadshow Fund, and 8% going to the General SI Discretionary Fund. In addition to these funds, the Research and Economic Development Division provided funds to the Science Institute to invest in personnel and programs that were not supported through Science Initiative funds.

THE FUTURE

In the next year, we will continue to ramp up the initiative programs and will begin utilizing the newly constructed facilities. This will include funding additional undergraduate research awards to students; hiring additional personnel to mentor student researchers and develop and implement course-based undergraduate research; and selecting the second of three total Science Initiative PhD Fellowship cohorts. The Model Organism Research Facility will also begin operations.



AGENDA ITEM TITLE: Faculty Workload Report, Benham Deal



AY 2024-25 Annual Faculty Workload Report A Report to the Board of Trustees January 23, 2025

"Faculty workload" refers to the relative distribution of effort assigned to various activities that faculty members at the University of Wyoming engage in to support the mission of the University, including teaching; research and/or creative activities; administration; service, outreach, and community engagement; advising; clinical, diagnostic, and professional practice; and extension.

Faculty Workload Policy at the University of Wyoming

Faculty workloads are established consistent with UW Regulation 2-9 (Faculty Workload), which emphasizes the need for a flexible workload policy that allows academic units to capitalize on each faculty member's strengths to meet the mission of the university, college, and academic unit. Standard or baseline teaching loads for tenure-stream faculty are specified as 15 credits per academic year, which equates to 62.5% of the total workload (or 25% for two 3-credit classes per year). This standard metric was implemented in the University of Wyoming's Academic Plan II (2004-2009). The remaining workload (37.5%) is allocated to other duties including research/creative activities, service, extension, etc. Adjustments to workload allocations may be made by unit heads and approved by the deans.

Faculty Workload – AY 2024-25

The following data sources were used in compiling this report:

- 1. Job descriptions for AY24-25 (Fall 2024, Spring 2025) submitted by department heads, deans, and directors by October 11, 2024. This report includes data on a total of 801 faculty.
 - 467 1.0 FTE tenure-stream faculty (assistant professor, associate professor, professor)
 - 161 1.0 FTE non-tenure-track instructional faculty (i.e., lecturers, professors of practice, instructional professors)
 - 173 additional non-tenure-track faculty, including 25 clinical faculty, 66 research faculty (research scientists [64], research professors [2]), 51 extension educators, 23 librarians, 4 curators, 3 faculty development professional, and 1 executive professor.
 - 2. Data on class sections taught, class-section enrollment, course credits taught, student-credit hours, and percent of student credit-hours by enrollment from the Banner Student Information System for Fall 2023, Spring 2024, Fall 2024.

Key Findings:

- Almost all tenure-stream faculty have research and/or creative activities in their job description.
 More than half of the tenure-stream faculty have 40% or more of their overall workload assigned to research/creative activities. This workload percentage is consistent with some of the university's R1 comparators.
- 2. The majority of tenure-stream faculty have teaching loads adjusted to below 50% of the total workload. Of the remaining faculty who have teaching loads at or above 50% of the overall workload, the majority are in the humanities, social sciences, and education. To increase research productivity and research expenditures, it may be necessary to find ways to reduce teaching loads for these faculty to allow for increases in total effort toward scholarly activities.
- 3. Most non-tenure-track instructional faculty teach 15 credits or higher; slightly more than half of them teach 18 credits or more per year.
- 4. On average non-tenure-track instructional faculty, when combined with temporary lecturers, teach the most class sections and credit hours. Their classes, many of which are at the introductory level, tend to have larger enrollments per section.
- 5. Many tenure-stream and non-tenure track faculty have additional duties associated with administration, service, outreach and engagement, extension, and advising.

Research/Creative Activity

The University of Wyoming is expected to achieve Carnegie Classification of Institutions of Higher Education as a doctoral-granting institution with very-high research activity (R1) once the new Carnegie Classifications are released and the university is eligible for consideration. Having R1 status can help to raise UW's profile and its ability to attract and retain new faculty, research funding, and students.

Job descriptions for AY 2024-25 were submitted by department heads for 801 faculty members; of those, 467 were tenure-stream faculty (i.e., Assistant Professors, Associate Professors, Professors).

Almost all tenure-stream faculty (99.6%, n=465) have research and/or creative activities in their job description. Of the 413 tenure-stream faculty who are not on a full year sabbatical leave where the research load is 100% and/or who do not hold administrative appointments as associate deans and department heads, 43% (n=256) have 50% or more of their overall workload assigned to research and/or creative activities and 62% of them (n=178) have research loads at 40% or higher.

Sixty-six (66) non-tenure track research faculty (Research Scientists, Research Professors) also have research duties assigned in their job descriptions and contribute to the research mission of the university. Nearly 73% (n=61) have research loads of 50% or higher.

Snapshot: Faculty Workload at R1 Universities

Workloads vary significantly by discipline at R1 universities. For example, standard teaching loads for research-active tenure-stream faculty in the basic sciences (e.g., physics, chemistry, and biology) are generally 2 courses per year, which equates to a 25% teaching load at UW. These faculty are frequently expected to maintain extramural funding in support of their research and have significant teaching responsibilities in mentoring graduate and undergraduate students as well as postdoctoral scholars. Standard teaching loads in engineering, geosciences, and mathematics are typically 3-4 classes per year, which equates to a 37.5% to 50% teaching load at UW. Teaching in the humanities, social sciences, arts, business, and education may be as high as 4-5 courses per year, which equates to a 50% to 62.5% teaching load at UW.

Many R1 institutions do not have university-level regulations or rules requiring a specific standard weighting of teaching, research, service and leadership, and other activities. Some institutions do have university policies that provide general guidance on workload distributions.

For example, the University of Colorado Board of Regents' policy states:

Tenured and tenure-track faculty workloads may be negotiated consistent with the university's commitment to teaching, scholarly/creative work, leadership and service, and where applicable, other activities specific to a unit (e.g., clinical activity, librarianship) based on individual faculty needs (e.g., career development, tenure and promotion); conventions in particular academic disciplines; academic unit program needs; and the goals and objectives of the school/college and campus. (Source: https://www.cu.edu/regents/policy/5.)

The Office of Faculty Affairs at the University of Colorado provides additional guidance on differentiated workloads:

Faculty with normal assignments are expected to engage in and demonstrate merit in the areas of teaching, research, and service. In the aggregate, as a school/college or total campus, the interpretation of Regents' policy on faculty performance is that the faculty workload is approximately weighted 40% teaching, 40% research and scholarly effort, and 20% service. (Source: https://www.colorado.edu/facultyaffairs/differentiated-workloads)

By comparison, 62% of tenure stream faculty at UW have research loads of 40% or higher. The majority of the remaining faculty who have lower research loads (and higher teaching loads) tend to be in the arts and humanities, social and behavioral sciences, and education.

It is not uncommon for R1 universities to give workload discretion to the department or college level, with oversight by the Chief Academic Officer (i.e., Provost) and mandate departments and colleges to have discipline specific workload policies or guidelines.

For example, at Colorado State University, individual workloads are negotiated between the faculty and department head, who has the ultimate responsibility for adjusting workload and coordinating the aggregate faculty members' effort, effort distribution, and workload assignments appropriate to the mission of the department. The dean is responsible for coordinating and evaluating the aggregate department efforts appropriately. (Source: https://facultycouncil.colostate.edu/faculty-manual-section-e/#E.9.2)

Similarly, the differentiated annual workload is determined at the department or college level at the University of Colorado. For example, the standard teaching weight for evaluation purposes in the College of Engineering and Applied Sciences is 40%, which includes individual mentoring in addition to traditional classes. As per their policy, "research-active faculty are encouraged to 'buy down' their teaching responsibilities to two course per academic year... Faculty who are less research active are expected to contribute to their departments with additional teaching and/or service." (Source: https://www.colorado.edu/engineering-facultystaff/guidelines-teaching-loads-tenured-tenure-track-faculty)

This year's faculty workload report shows that many UW faculty have job descriptions that include adjustments for larger allocations in research/creative activities and that these allocations are similar to some of UW's R1 comparators.

Teaching

Teaching is fundamental to fulfilling our land-grant mission of providing excellent educational opportunities to students. We expect faculty to follow best practices in pedagogy and to teach classes that are consistent with their appointment and discipline.

Teaching Loads at UW

As reported in AY 2024-25 job descriptions, teaching loads vary across colleges and disciplines. However, nearly all *tenure-stream faculty* have some type of teaching responsibility – either through traditional group instruction (i.e., group 1 classes), individualized instruction (i.e., group 2 classes), or a combination of both types of instruction.

- Almost all (97%, n=452) tenure-stream faculty (assistant professors, associate professors, professors) have teaching assignments.
- Only 16 tenure-stream faculty have no teaching assignments for the academic year. These faculty are either on sabbatical leave (100% research for the academic year), have a combination of at least 50% administrative duties plus research and/or service duties, or have more than 50% of their workload tied to extension duties.
- The percentage of overall workload assigned to teaching duties, including group 1 and group 2 classes, vary among tenure-stream faculty (see table below).

Range	N	%
62.5% or higher	84	18.0%
50% - 62.4%	95	20.3%
37.5% - 49.9%	89	19.1%
25% - 37.4%	145	31.0%
Less than 25%	54	11.6%

- Frequently faculty with the lowest teaching loads have the highest research loads (and often the
 highest expectations for grant activity). Consistent with other R1 universities, many of the lowest
 teaching loads/highest research loads are held by faculty in disciplines within Engineering and
 Physical Sciences, Molecular Biology, and Economics.
- Many faculty with the highest teaching loads come from disciplines like the arts, humanities, social and behavior sciences, and education.

Job descriptions were submitted for 161 *instructional faculty* (instructional professors, lecturers, and professors of practice).

- The majority of instructional faculty (60.3%, n=97) have teaching loads of 75% or higher of the overall workload or higher.
- Most non-tenure-track instructional faculty (75.8%, n=122) have teaching loads of 62.5% or higher (i.e., at least 15 credits, 2-3 load).
- Of those instructional faculty who have teaching loads below 62.5%, 43.6% carry administrative workloads of 25% or higher.
- Non-tenure-track instructional faculty provide critical service to the university and state. Approximately one-third of them have workloads of 25% or higher associated with university service and/or outreach.

Job descriptions were submitted for 25 *clinical* faculty. All clinical faculty have teaching duties, with teaching loads ranging from 12.5% to 87.5%. Clinical faculty with the lowest teaching loads tend to have the highest administrative loads (range: 12.5% to 62.5%) and/or the highest clinical/professional/diagnostic practice loads (range: 45% to 80%).

Other non-tenure-track faculty may have small teaching loads, but their workload primarily focuses on the practice of their disciplines (i.e., archivists, librarians, faculty development professionals, and extension educators), as well as the activities that are essential to the business and mission of the university.

In addition to job description percentages, another method for describing teaching workload is by examining: (1) Credit-Bearing Class Sections Taught – accounting for cross-listed courses by counting them only once, (2) Class Section Enrollment - Number of students taught per section, (3) Course Credits Taught – Credit-hour value for the course a faculty member teaches, (4) Student Credit Hours taught by Faculty Assignment – a measure that represents the number of students enrolled in each course section multiplied by the credit hour value assigned to each course section. These measures have remained fairly stable from Fall 2023 to Fall 2024 (see Appendix A).

Since there are more tenure-stream faculty than other categories of faculty and/or types of instructors, the highest percentage of student credit hours are taught by Assistant Professors, Associate Professors, and Professors (see Appendix B). Consistent with job description data, however, non-tenure-track instructional faculty (e.g., full-time lecturers, instructional professors, professors of practice) are instrumental in delivering the curriculum. On average, when combined with temporary lecturers, they teach the most class sections and credit hours; and their classes, many of which are at the introductory level, tend to have larger enrollments per section.

Group 1 – Group 2 Instruction

As noted above, faculty provide formal instruction through two types of classes - group and individualized. Group instruction, or Group 1 classes, include lecture, laboratory, discussion, seminar, recitation, and studio classes. Individualized instruction, or Group 2 classes, include lessons, internship, readings, clerkship, practicum, independent study, independent research, thesis research, dissertation research, and continuing registration. Faculty workload associated with Group 2 classes is often time intensive and difficult to quantify; however, unit heads have begun to incorporate effort toward Group 2 classes into the overall teaching load in faculty job descriptions.

The tables in Appendix C show student credit hours and percentage of student credit hours by type of instruction and semester. More than 90% of student credit hours are taught through group instruction. Classes coded as "Lecture" make up the majority of group instruction (95%); however, while these classes may be delivered in the traditional 'lecture' format, they may also be implemented using different teaching styles including active-learning approaches. A smaller percentage of student credit hours are delivered via individualized instruction, with independent study and practicum experiences being the primary mode of delivery. More individualized instruction occurs in the spring semester – often a result of end-of-program projects and practicums/internships.

Other Duties

Although research/creative activities and teaching comprise the largest percentage of workload for faculty, other duties are essential to the service/outreach mission of the university and to the functioning of the unit, college, and university. Below is a snapshot of those duties.

- Tenure-stream faculty serving as associate deans and school directors have administrative loads ranging from 35% to 100% of total workload. The median administrative effort for academic unit heads is 50%, with a range of 30% to 55% of the total workload. All academic unit heads also teach (median, 25% of overall workload, with range of 12.5% to 37.5%) and conduct research (median: 21.5% of total workload, with range of 12.5% to 50%).
- All tenure-stream faculty have a university service component in their job description. Workload associated with these duties is typically 10% or less; however, some faculty carry higher service loads depending on the nature of the service. Advising duties are include in a small percentage of faculty workloads (e.g., 35% of tenure-stream faculty have 5% or less of total workload allocated to this category).
- A few tenure-stream faculty (n=4) reported extension activities as part of their workload, with effort ranging from 35% to 60% of the overall workload.
- Most non-tenure-track instructional faculty (93%) have service responsibilities and 62% have at least 5% of their overall workload assigned to advising duties.

Conclusion

Creative development, advancement of knowledge, and dissemination of knowledge are essential to the mission of a public, land-grant, and flagship university. Data presented in this report provide an overview of faculty workload, which reflects an aggregate of time devoted to all forms of scholarship (i.e., research and creative activities); teaching; service, including university and professional service, outreach, and community engagement; extension; administration; and diagnostic, clinical and professional practice. To be competitive in the recruitment and retention of excellent tenure-stream faculty who will be instrumental in helping the university achieve and maintain R1 classification, research loads must be consistent with research loads at peer and aspirant institutions and must allow for adequate time to devote to scholarship.

Appendix A

Group Instruction Credit-Bearing Courses by Semester and Faculty Type

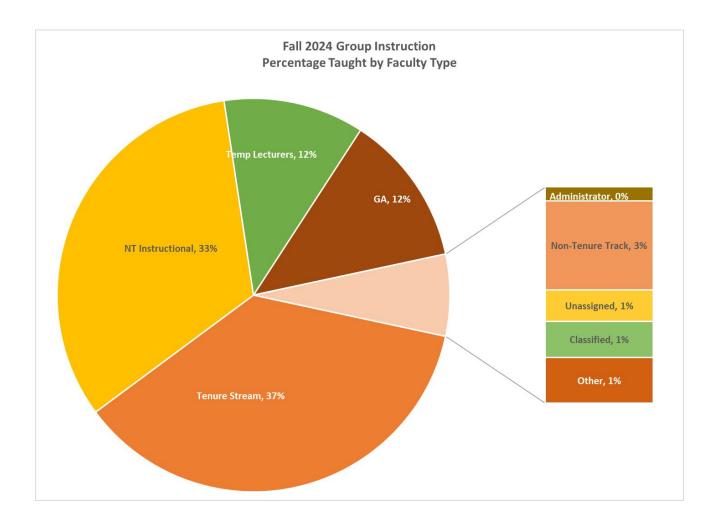
		Averd	Туре			
Fall 2024	# of Faculty	Class Sections Taught	Class Section Enrollment	Course Credits Taught	Student Credit Hours (SCH)	% of SCH
Tenure Stream	440	1.8	37.5	6.2	100.8	36.5%
Non-TT Instructional	200	2.6	69.7	8.6	198.8	32.7%
Temporary Lecturers	160	1.2	32.4	4.0	87.9	11.6%
Graduate Assistants	405	0.3	6.5	0.8	37.4	12.5%
Administrators	14	1.1	22.1	2.8	37.9	0.4%
Other	153	0.8	17.8	2.2	49.8	6.3%

		Averd				
Spring 2024	# of Faculty	Class Sections Taught	Class Section Enrollment	Course Credits Taught	Student Credit Hours (SCH)	% of SCH
Tenure Stream	405	1.7	34.3	6.0	95.7	35.1%
Non-TT Instructional	191	2.5	65.5	7.9	187.2	32.4%
Temporary Lecturers	175	1.2	30.4	4.0	89.0	14.1%
Graduate Assistants	389	0.3	6.8	0.9	34.7	12.2%
Administrators	18	0.9	17.0	3.2	50.4	0.8%
Other	122	1.0	17.1	2.6	47.5	5.3%

		Averd	age Based on # o	of Faculty by	Туре	
Fall 2023	# of Faculty	Class Sections Taught	Class Section Enrollment	Course Credits Taught	Student Credit Hours (SCH)	% of SCH
Tenure Stream	407	1.8	38.4	6.3	106.0	35.2%
Non-TT Instructional	195	2.6	74.0	8.7	218.2	34.7%
Temporary Lecturers	155	1.3	35.3	4.3	97.7	12.3%
Graduate Assistants	408	0.3	7.4	0.9	34.6	11.5%
Administrators	16	1.3	38.7	3.8	66.7	0.9%
Other	142	0.8	17.4	2.4	46.8	5.4%

Note: Courses with 0 course credits are excluded. Army & Air Force Courses are excluded. Only courses with numbers of 1000-6999 are included.

Appendix B



Appendix C
Student Credit Hours by Semester and Instruction Type

	Fall 2023	Spring 2024	Fall 2024
Group Instruction	122,643.0	110,309.0	121,468.5
Lecture	117,602.5	104,601.5	116,753.5
Seminar	2,562.0	3,297.0	2,458.0
Studio	1,816.0	1,977.5	1,551.0
Lab	399.0	430.0	376.0
Ensemble	181.5	3.0	210.0
Discussion	82.0	0.0	120.0
Individualized Instruction	8,482.5	10,989.5	8,587.5
Independent Study	4,618.0	5,190.5	5,100.5
Practicum	2,309.0	3,922.0	1,825.0
Internship	796.5	1,034.0	757.0
Lesson	436.0	488.0	574.0
Clerkship	200.0	172.0	180.0
Research	123.0	183.0	151.0
Total	131,125.5	121,298.5	130,056.0

Percentage of Student Credit Hours by Semester and Instruction Type

	Fall 2023	Spring 2024	Fall 2024
Group Instruction	93.5%	90.9%	93.4%
Lecture	95.9%	94.8%	96.1%
Seminar	2.1%	3.0%	2.0%
Studio	1.5%	1.8%	1.3%
Lab	0.3%	0.4%	0.3%
Ensemble	0.1%	0.0%	0.2%
Discussion	0.1%	0.0%	0.1%
Individualized Instruction	6.5%	9.1%	6.6%
Independent Study	54.4%	47.2%	59.4%
Practicum	27.2%	35.7%	21.3%
Internship	9.4%	9.4%	8.8%
Lesson	5.1%	4.4%	6.7%
Clerkship	2.4%	1.6%	2.1%
Research	1.5%	1.7%	1.8%
Total	100.0%	100.0%	100.0%

AGENDA ITEM TITLE: Service Contract and Procurement Reports, Evans

UW Regulation 7-2 (Signature Authority) Contracts Board Report - October 16, 2024 - December 15, 2024

Contract Number	J	Contract Type	Department Department	Supplier Supplier		ed Amount Signer
22001PFMFinancialAdvisorsNov2024		Services Contract	•	PFM Financial Advisors, LLC	2024-12-11	50,000.00 Alexander Kean, Vice President, Budget & Finance
12211 LAR ACA Hort Educator 2024-2025				<u>'</u>		58,923.00 Kelly Crane, Dean/Extension Educator, Sr
12211 LAR ACA HOFT Educator 2024-2025	Annual Compensation Agreement	Services Contract	College of Agriculture & Natural Resources	Laranne County Government	2024-10-23	58,925.00 Relly Craffe, Death/Exterision Educator, Si
12211 TTN ACA Adams 2024-2025	Annual Compensation Agreement	Services Contract	College of Agriculture & Natural Resources	Teton County Wyoming	2024-10-23	91,455.00 Kelly Crane, Dean/Extension Educator, Sr
13221-Grueninger-Dec2024	Group Tour Package Agreement	Services Contract	College of Arts & Sciences	GRUENINGER CRUISES AND TOURS, INC.	2024-12-09	871,493.00 Adrienne Freng, Interim Dean/Professor
14104-EAB-Sept 2024	Adult Learner Recruitment Services	Services Contract	College of Business	EAB Global Inc	2024-10-25	90,350.00 Scott Beaulier, Dean/Professor
16001-Laramie County Community College-May 2024	Amendment No. 1	Services Contract	College of Engineering & Applied Science	Laramie County Community College	2024-12-06	60,000.00 Cameron Wright, Dean/Professor
16101StraightFlightN200102024	N200 Maintenance	Services Contract	College of Engineering & Applied Science	Straight Flight Inc	2024-11-05	80,090.00 Cameron Wright, Dean/Professor
16203-Thermo Electron North America LLC - October 2024	Service Plan Quotation	Services Contract	College of Engineering & Applied Science	Thermo Electron North America LLC	2024-10-17	69,914.84 Cameron Wright, Dean/Professor
17104-ColtonAllen-Oct2022	Agreement for Services	Services Contract	College of Health Sciences	Colton Allen	2024-11-19	300,000.00 Michelle Hilaire, Vice Provost/Interim Dean/Clinical Professor
17107_CMO Search_10042024	CMO Search	Services Contract	College of Health Sciences	Diversified Search LLC	2024-10-30	80,000.00 Michelle Hilaire, Vice Provost/Interim Dean/Clinical Professor
18003Lexis+May2024	Lexis+	Services Contract	College of Law	LexisNexis a div of Reed Elsevier Inc	2024-11-20	57,595.31 Julie Hill, Dean/Professor
27001_Colorado_West_Minibuses_27001	Purchase Agreement - UW & Colorado/West Equipment Inc.	Services Contract	General University Operations	Colorado/West Equipment, Inc	2024-12-02	602,228.52 William Mai, Vice President, Campus Operations
Fuel Contract -October 2024	Atlantic Petroleum	Services Contract	General University Operations	Atlantic Petroleum	2024-11-11	250,000.00 William Mai, Vice President, Campus Operations
100031_Terra Nova_August2024	Terrra Nova_University of Woming	Services Contract	Global Engagement	Terra Nova ehf	2024-11-19	84,010.36 Isadora Helfgott, Vice Provost/Assoc Professor, Global Engagement
10401LPACOctober2024	Agreement for Services	Services Contract	Haub School of Environment and Natural Resources	Laramie Public Art Coalition	2024-11-20	68,050.00 John Koprowski, Professor/Dean/Wyo Excellence Chair
40002_Wolfram_License_Oct2024	Wolfram License 3 Year Agreement	Services Contract	Information Technology	Wolfram Research Inc	2024-10-29	143,226.05 Robert Aylward, Vice President
40003_Watermark_Nov2024	Course Evaluation & Survey Renewal	Services Contract	Information Technology	Watermark Insights LLC	2024-12-11	82,255.05 Jennifer Chavez, Interim Vice President/CIO
40004_ANM_Isilon Renewal_Nov2024	Isilon Renewal 2025-2026	Services Contract	Information Technology	Advanced Network Management, Inc	2024-11-25	137,945.67 Jennifer Chavez, Interim Vice President/CIO
40004_Oracle_Recruiting Booster_Oct2024	Recruiting Booster	Services Contract	Information Technology	Oracle America, Inc.	2024-10-31	61,982.29 Robert Aylward, Vice President
61002SydneyHumphreyOct2024	-	Services Contract	Institutional Marketing	Humphrey, Sydney	2024-10-28	50,000.00 Chad Baldwin, Assoc VP, Comm&Mkting
90001 - Teamworks - Aug 2023	Application Service Provider Agreement	Services Contract	Intercollegiate Athletics	Teamworks Innovations Inc	2024-12-03	740,250.00 Thomas Burman, Athletic Director
90251 - Key Lime Air - October 2024	Charter Flight Agreement	Services Contract	Intercollegiate Athletics	Key Lime Air	2024-10-24	135,648.02 Samuel Brodie, Assoc AD/Budgeting & Fin Mgmt
10045-XcaliburSCRIBE-Oct2024	Xcalibur SCRIBE GUWY Contract 2024-2031	Services Contract	Provost	Xcalibur Inc	2024-11-22	250,750.00 Tami Benham-Deal, Senior Vice Provost/Professor
10502 - MXR Imaging - November 2024	PM Agreement for Canon - Aquilion 16	Services Contract	Research & Economic Development	MXR Imaging	2024-12-04	149,550.00 Parag Chitnis, Vice President/Professor, Research & Economic Development
71005EducationDevelopmentCenterNov2024	71005EducationDevelopmentCenterNov2024	Services Contract	Research & Economic Development	Education Development Center, Inc.	2024-11-11	1,200,000.00 Ed Seidel, President
71005GrayMouseConsultingNov2024	71005GrayMouseConsultingNov2024	Services Contract	Research & Economic Development	Gray Moose Consulting, LLC	2024-11-12	50,000.00 Parag Chitnis, Vice President/Professor, Research & Economic Development
71005TexasMarketResearchGroupOct2024	71005TexasMarketResearchGroupOct2024	Services Contract	Research & Economic Development	Texas Market Research Group LLC - ReconMR	2024-10-23	70,908.00 Parag Chitnis, Vice President/Professor, Research & Economic Development
71005UniversityofNorthFloridaNovember2024	71005UniversityofNorthFloridaNovember2024	Services Contract	Research & Economic Development	University of North Florida	2024-11-21	60,000.00 Parag Chitnis, Vice President/Professor, Research & Economic Development
10501-ALS-Oct2024	ALS Technical Services	Services Contract	School of Energy Resources	ALS USA Inc	2024-10-23	75,000.00 Holly Krutka, Executive Director
10501-SouthernCo-Sept2024	ITC's NCCC Contribution Agreement	Services Contract	School of Energy Resources	Southern Company Services, Inc.	2024-10-30	91,666.67 Holly Krutka, Executive Director
10501-TriHydro_Dec2022	Agreement for Services Btwn UW & TriHydro Corp.Amendment No.3	Services Contract	School of Energy Resources	TriHydro Corp	2024-11-13	356,641.00 Holly Krutka, Executive Director
19002-S&PGlobal-Oct2024	Order Form to the Exhibit A	Services Contract	University Libraries	S&P Global Market Intelligence LLC	2024-12-03	62,850.00 Cassandra Kvenild, Dean/Librarian ETT
19002-ThomsonReuters-Sept2024	Order Form	Services Contract	University Libraries	Thomson Reuters - West	2024-10-25	50,035.44 Cassandra Kvenild, Dean/Librarian ETT
26001BlackHillsEnergyJuly2024GasServiceAgreementLewistoSorority	Gas Service Agreement	Services Contract	University Operations	Black Hills Energy	2024-11-13	137,073.11 William Mai, Vice President, Campus Operations
26001ByArchitecturalMeansNov2024Amend13LawSchoolExpansion& Renovation	Amendment No. 13	Services Contract	University Operations	By Architectural Means, PC	2024-12-09	208,205.00 William Mai, Vice President, Campus Operations
26001ContractFurnishingsSept2024DiningHall&ResidenceHallAncillar vFurniture	Agreement Between Owner and Contractor	Services Contract	University Operations	Contract Furnishings, Inc.	2024-11-25	647,158.93 William Mai, Vice President, Campus Operations
26001EngineeredDemolitionSept2024WarMemorialStadiumPressBox Abatement	Agreement Between Owner & Contractor	Services Contract	University Operations	Engineered Demolition, Inc.	2024-10-23	189,170.00 William Mai, Vice President, Campus Operations
26001JEDunnOct2024CO8StudentHousing&Dining	University of Wyoming Student Housing & Dining	Services Contract	University Operations	JE Dunn Construction Company	2024-11-13	144,157.00 William Mai, Vice President, Campus Operations
26001JEDunnOct2024CO9StudentHousing&Dining	Change Order No. 9	Services Contract	University Operations	JE Dunn Construction Company	2024-11-13	88,553.00 William Mai, Vice President, Campus Operations
26001LERRennerSportsSurfacesMarch2024UWTrackResurfacingProjectMemorialFieldhouse	Agreement Between Owner & Contractor	Services Contract	University Operations	Renner Sports Surfaces	2024-11-25	393,990.00 William Mai, Vice President, Campus Operations
26001PrairieEquipmentLLCSept2024DesignBuildLaramieR&EFeedMill Replacement	Design-Build Project Agreement	Services Contract	University Operations	Prairie Equipment LLC	2024-11-07	222,000.00 William Mai, Vice President, Campus Operations
26001WyomingOfficeProductsSept2024DiningHallFurniture&Residen eHallAnciillaryFurniture	Agreement Between Owner & Contractor	Services Contract	University Operations	Wyoming Office Products & Interiors	2024-11-12	665,421.76 William Mai, Vice President, Campus Operations
31014-Medicat-Dec-2024	Medicat Software as a Service Master Terms and Conditions	Services Contract	VP Student Affairs Office	Medicat, LLC	2024-12-05	679,027.13 Jennifer Chavez, Interim Vice President/CIO

UW Regulation 7-2 (Signature Authority) Procurement Board Report - October 16, 2024 - December 15, 2024

PO Date	Supplier Name	Line #	Dist #	# [Description	Quani	ty Line Unit Price	Total Line Price	Total PO Amount	Department	Last Approver	Last Approver Title	Approval Date
10/16/2024	Thomson Reuters - West	1	1	þ	This is to serve as a blanket PO for Thomson Reuters. They provide many books and subscriptions to the Law Library. SSN KLW-2024-33 for Thomson Reuters.	1	334,000.00	334,000.00	334,000.00	Law Library	Hill, Julie	Dean/Professor	10/16/2024
10/16/2024	AEGEAN AURORA TRAVEL DESIGNERS	1	1		Design and implementation of the January 2025 Health, History, Olympics and Olives faculty-led study abroad class with 22 students and 2 faculty/staff.	1	3,500.00	3,500.00		Education Abroad	Frank, Cheri	Assistant Director, Business Operations	10/16/2024
10/16/2024	AEGEAN AURORA TRAVEL DESIGNERS	1	2		Design and implementation of the January 2025 Health, History, Olympics and Olives faculty-led study abroad class with 22 students and 2 faculty/staff.	1	3,356.52	3,356.52		Education Abroad	Frank, Cheri	Assistant Director, Business Operations	10/16/2024
10/16/2024	AEGEAN AURORA TRAVEL DESIGNERS	1	3	0	Design and implementation of the January 2025 Health, History, Olympics and Olives faculty-led study abroad class with 22 students and 2 faculty/staff.	1	62,985.48	62,985.48	69,842.00	Education Abroad	Frank, Cheri	Assistant Director, Business Operations	10/16/2024
10/18/2024	Express Services Inc - Express Employment Professionals	1	1	V	WYSAC; assists WYSAC with hiring part-time employees for WYSAC Call Center as we are short of staff.	1	0.00	0.00		Wyoming Survey & Analysis Center	Chitnis, Parag	Vice President/Professor, Research & Economic Development	10/18/2024
10/18/2024	Express Services Inc - Express Employment Professionals	1	2	٧	WYSAC; assists WYSAC with hiring part-time employees for WYSAC Call Center as we are short of staff.	1	0.00	0.00		Wyoming Survey & Analysis Center	Chitnis, Parag	Vice President/Professor, Research & Economic Development	10/18/2024
10/18/2024	Express Services Inc - Express Employment Professionals	1	3	V	WYSAC; assists WYSAC with hiring part-time employees for WYSAC Call Center as we are short of staff.	1	0.00	0.00	250,731.00	Wyoming Survey & Analysis Center	Chitnis, Parag	Vice President/Professor, Research & Economic Development	10/18/2024
10/21/2024	University of Nebraska Medical Center	1	1	2	2024-2025 cost of attendance for Wyoming students to attend the UNMC College of Dentistry	1	518,306.00	518,306.00	518,306.00	WyDENT	Seidel, Ed	President	10/21/2024
10/22/2024	Luxo Jet Inc	1	1	N	Men's Basketball Charter Flight to/from Lubbock, TX for the Texas Tech Game (11/12/24 - 11/13/24)	1	44,750.00	44,750.00		Mens Basketball	Brodie, Samuel	Assoc AD/Budgeting & Fin Mgmt	10/22/2024
10/22/2024	Luxo Jet Inc	2	1	N	Men's Basketball Charter Flight to/from San Jose Airport in California for the San Jose State University game (1/24/25 - 1/25/25)	1	54,500.00	54,500.00		Mens Basketball	Brodie, Samuel	Assoc AD/Budgeting & Fin Mgmt	10/22/2024
10/22/2024	Luxo Jet Inc	3	1	N	Men's Basketball Charter Flight to/from San Diego, CA for the San Diego State University game (1/31/25 - 2/1/25)	1	46,900.00	46,900.00		Mens Basketball	Brodie, Samuel	Assoc AD/Budgeting & Fin Mgmt	10/22/2024
10/22/2024	Luxo Jet Inc	4	1	N	Men's Basketball Charter Flight returning from Albuquerque, NM to Laramie, WY on 2/12/25 from the University of New Mexico	1	27,175.00	27,175.00	173,325.00	Mens Basketball	Brodie, Samuel	Assoc AD/Budgeting & Fin Mgmt	10/22/2024
10/24/2024	EJ Services LLC	1	1	N	MVMP: 1st Floor North Renovation	1	167,644.54	167,644.54	167,644.54	Facilities Engineering	Samp, Michael	Assoc VP for Univ Operations	10/24/2024
10/28/2024	City of Laramie, Wyoming	1	1	L	WATER METER AND PLANT INVESTMENT FEES TO THE CITY OF LARAMIE FOR THE WAR MEMORIAL STADIUM WEST STANDS PROJECT	1	149,149.00	149,149.00	149,149.00	Facilities Construction Mgt	Samp, Michael	Assoc VP for Univ Operations	10/28/2024
10/29/2024	C & B Operations, LLC	1	1	2	2025 John Deere 6M 220 Tractor	0.1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	27,500.00		Agricultural Experiment Station	Crane, Kelly	Dean/Extension Educator, Sr	10/29/2024
10/29/2024	C & B Operations, LLC	1	2	_	2025 John Deere 6M 220 Tractor	0.3	, , , , , , , , , , , , , , , , , , , ,	82,500.00		Agricultural Experiment Station	Crane, Kelly	Dean/Extension Educator, Sr	10/29/2024
10/29/2024	C & B Operations, LLC	1	3	_	2025 John Deere 6M 220 Tractor	0.0	,	13,750.00		R&E Center Powell	Crane, Kelly	Dean/Extension Educator, Sr	10/29/2024
10/29/2024	C & B Operations, LLC	1	4	_	2025 John Deere 6M 220 Tractor	0.15	,	41,250.00		R&E Center Powell	Crane, Kelly	Dean/Extension Educator, Sr	10/29/2024
10/29/2024 10/29/2024	C & B Operations, LLC BMP RACKMOUNT SOLUTIONS LLC	1	1		2025 John Deere 6M 220 Tractor 15 KVA/13.5 KW UPS SYSTEM WITH INTERNAL 13 MINUTE	0.4	-,	110,000.00 53,658.00	-	R&E Center Powell Facilities Engineering	Crane, Kelly Bryant, Darcy	Dean/Extension Educator, Sr Deputy Director, Business Serv	10/29/2024
		,		I I	BATTERY. SINGLE PHASE (120/208/240). FACTORY STARTUP INCLUDED								
10/29/2024	BMP RACKMOUNT SOLUTIONS LLC	2	1	_	SHIPPING	1	2,0700			Facilities Engineering	Bryant, Darcy	Deputy Director, Business Serv	10/29/2024
10/29/2024	West Fork Construction, LLC	1	1	_	WINTER MAINTENANCE 2024-2025 NTE \$50,000.00	1	50,000.00	50,000.00		Facilities Engineering	Bryant, Darcy	Deputy Director, Business Serv	10/29/2024
11/05/2024 11/05/2024	Diversified Search LLC Diversified Search LLC	1	3	_	CMO Search CMO Search	1	15,750.00 27,562.50	15,750.00 27,562.50		Albany Community Health Clinic Family Medicine Residency Programs	Smoll, Thomas Smoll, Thomas	Executive Director, Educational Health Ctr of Wyo (CEO) Executive Director, Educational Health Ctr of Wyo (CEO)	11/04/2024
						1				Cheyenne	,		
11/05/2024	Diversified Search LLC	1	1		CMO Search	1	35,437.50		·	Family Medicine Residency Programs Casper		Executive Director, Educational Health Ctr of Wyo (CEO)	11/04/2024
11/05/2024	GenScript USA Inc	1	1		L00847-A Name: SARS-CoV-2 Surrogate Virus Neutralization Test Kit; Qty: 100; Catalog No: L00847-A; Size: 96.0Tests	100	700.00	70,000.00		Animal Science	White, Daniel	Financial Analyst	11/05/2024
11/05/2024	GenScript USA Inc	2	1	_	Freight and shipping	1	575.00			Animal Science	White, Daniel	Financial Analyst	11/05/2024
11/07/2024	TA Instruments Inc	1	1		TA - Instruments Inc - Waters LLC DISCOVERY Differential Scanning Calorimeter 2500 for NERC RFP.	1	86,400.00	86,400.00	86,400.00	School of Energy Resources Directors Office	Vogt, Francis	Business Manager	11/07/2024
11/07/2024	TA Instruments Inc	1	1	F	RHEOMETER HR20	1	87,822.50	87,822.50	87,822.50	VP for Research & Economic Development Office	Miller, Jamison	Dir, Business Operations	11/05/2024
11/07/2024	Casper College	1	1		Casper College 2024 Fall Student Fees UW/Casper payable to Casper College per attached MOU	1	53,004.00	53,004.00	53,004.00	Office of Online & Continuing Education	Stark, Stephanie	Dir, Business Operations	11/07/2024
11/11/2024	Albany County Treasurer	1	4	2	2024 PROPERTY TAXES OWED FOR UNIVERSITY OWNED HOUSE, LOTS, AND MEDICAL OFFICE BUILDING.	1	63,871.64	63,871.64		Real Estate Operations	Bryant, Darcy	Deputy Director, Business Serv	11/11/2024
11/11/2024	Albany County Treasurer	1	3	2	2024 PROPERTY TAXES OWED FOR UNIVERSITY OWNED HOUSE, LOTS, AND MEDICAL OFFICE BUILDING.	1	3,189.00	3,189.00		Real Estate Operations	Bryant, Darcy	Deputy Director, Business Serv	11/11/2024
11/11/2024	Albany County Treasurer	1	1	2	2024 PROPERTY TAXES OWED FOR UNIVERSITY OWNED HOUSE, LOTS, AND MEDICAL OFFICE BUILDING.	1	260.98	260.98		Real Estate Operations	Bryant, Darcy	Deputy Director, Business Serv	11/11/2024
11/11/2024	Albany County Treasurer	1	2	2	2024 PROPERTY TAXES OWED FOR UNIVERSITY OWNED HOUSE, LOTS, AND MEDICAL OFFICE BUILDING.	1	370.33	370.33	67,691.95	Real Estate Operations	Bryant, Darcy	Deputy Director, Business Serv	11/11/2024
11/11/2024	Pinnacle Cabinet & Millwork, Inc.	1	1		WYOMING STATE VET LAB: BUILD AND INSTALL NEW CABINETS	1	70,610.00	70,610.00	70,610.00	Facilities Engineering	Bryant, Darcy	Deputy Director, Business Serv	11/11/2024
11/12/2024	Straight Flight Inc	1	1	C F	Straight flight will comply with the 6 Year/8000 Cycle landing gear overhaul of the RH landing gear, motor and gearbox. Replacement of the LH and NLG actuator drag brace and overhaul both props As per Service agreement dated10/30-3/31/2025.		85,000.00	85,000.00	85,000.00	Business Enterprises	Greenawalt, Kaylyn	Director, Shared Business Serv	11/12/2024
11/12/2024	Office Shop	1	1	S	Student Housing & Dining Project – dining/residence hall ancillary furniture	1	485,791.38	485,791.38	485,791.38	Facilities Construction Mgt	Samp, Michael	Assoc VP for Univ Operations	11/12/2024
11/12/2024	Ken Garff Cheyenne	2	1	2	2025 Toyota Sienna AWD, replacing UW-484	0.5	47,920.00	23,960.00		Transportation Services	Mai, William	Vice President, Campus Operations	11/12/2024
11/12/2024	Ken Garff Cheyenne	1	1	2	2025 Toyota Sienna AWD, replacing UW-402	0.5	47,920.00	23,960.00		Transportation Services	Mai, William	Vice President, Campus Operations	11/12/2024
11/12/2024	Ken Garff Cheyenne	2	2		2025 Toyota Sienna AWD, replacing UW-484	0.5	,, ,	23,960.00		Transportation Services	Mai, William	Vice President, Campus Operations	11/12/2024
11/12/2024	Ken Garff Cheyenne	3	2	_	2025 Toyota Sienna AWD, replacing UW-479	0.5	,	23,960.00		Transportation Services	Mai, William	Vice President, Campus Operations	11/12/2024
11/12/2024	Ken Garff Cheyenne	3	1	2	2025 Toyota Sienna AWD, replacing UW-479	0.5	5 47,920.00	23,960.00		Transportation Services	Mai, William	Vice President, Campus Operations	11/12/2024

11/12/2024	Ken Garff Cheyenne	1	2	2025 Toyota Sienna AWD, replacing UW-402	0.5	47,920.00	23,960.00	143.760.00 Tra	ansportation Services	Mai, William	Vice President, Campus Operations	11/12/2024
11/13/2024	Arthur J. Gallagher Risk Management	2	1	Travel accident insurance premium, effective 9/1/2024. Invoice	1	2,927.00	2,927.00		k Management Office	Evans, Tara	Vice President and General Counsel	11/13/2024
11/13/2024	Services, LLC Arthur J. Gallagher Risk Management	1	1	5292040 Student Travel Accident insurance premium, effective 9/1/2024.	1	·	47,709.00		k Management Office		Vice President and General Counsel	11/13/2024
	Services, LLC	1		Invoice 5329563	<u> </u>	47,709.00		,		Evans, Tara		
11/14/2024	Presidio Networked Solutions LLC	1	1	Yearly AP Order	1	98,881.15	98,881.15		terprise Infrastructure	Christensen, Margaux	Exec Administrator, IT Business Services	11/14/2024
11/15/2024	Compressor - Pump & Service Inc	1		VACUUM PUMP FOR AG STARTUP	1	57,194.00	57,194.00		cilities Management	Bryant, Darcy	Deputy Director, Business Serv	11/15/2024
11/15/2024 11/19/2024	Compressor - Pump & Service Inc Wildlife Drones Pty Ltd	2	1	Drone system, including Astro Drone & controller, Radio-	1	3,975.00 51,052.00	3,975.00 51,052.00	·	cilities Management ology & Physiology	Bryant, Darcy Boyles, Victoria	Deputy Director, Business Serv Dir, Business Operations	11/15/2024 11/15/2024
	,			Telemetry Receiver, battery chargers (4) and batteries (12)	1	31,032.00		200	ology & Filysiology	Boyles, Victoria	Dif, Business Operations	
11/19/2024	Wildlife Drones Pty Ltd	2		Annual support and upgrades for drone	1	3,014.00	3,014.00		ology & Physiology	Boyles, Victoria	Dir, Business Operations	11/15/2024
11/20/2024	Ott HydroMet Corp	4	1	OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube + Wind Shield + Cable	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	1	1	OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube + Wind Shield + Cable	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	14	1	OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube + Wind Shield + Cable	1	7,691.94	7,691.94	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	13	1	OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube + Wind Shield + Cable	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	12	1	OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube + Wind Shield + Cable	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	11	1	OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube + Wind Shield + Cable	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	10	1	OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube + Wind Shield + Cable	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	9	1	OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube +	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	8	1	Wind Shield + Cable OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube +	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	7	1	Wind Shield + Cable OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube +	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	6	1	Wind Shield + Cable OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube +	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	5	1	Wind Shield + Cable OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube +	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	3	1	Wind Shield + Cable OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube +	1	7,691.95	7,691.95	Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
11/20/2024	Ott HydroMet Corp	2	1	Wind Shield + Cable OTT, Pluvio 2 400, 750MM, SDI-12 RS-485 Impulse + Inst Tube +	1	7,691.95	7,691.95	107,687.29 Eco	osystem Science & Management	Crane, Kelly	Dean/Extension Educator, Sr	11/20/2024
	Clean Harbors Environmental Services Inc	1	1	Wind Shield + Cable SAFETY OFFICE (RMMC): REQUIRED HAZARDOUS WASTE	1	81,195.49	81,195.49	81,195.49 UW		Bryant, Darcy	Deputy Director, Business Serv	11/18/2024
11/26/2024	GERSTEL, Inc.	1	2	DISPOSAL GERRSTEL MultiPurpose Sampler robotic smart series (120cm) -	0.5	71,894.11	35,947.06		hool of Energy Resources Directors Office		Assistant Director, Business Operations	11/26/2024
11/20/2024	GERSTEE, IIIC.	•	2	XYZ robot based autosampler that can be configured to perform all standard injection techniques and sample workflows. Smart Series syringes and tools are equipped with integrated	0.5	71,054.11	33,947.00				Assistant Director, Business Operations	11/20/2024
11/26/2024	GERSTEL, Inc.	1	1	GERRSTEL MultiPurpose Sampler robotic smart series (120cm) - XYZ robot based autosampler that can be configured to perform all standard injection techniques and sample workflows. Smart Series syringes and tools are equipped with integrated	0.5	71,894.11	35,947.06	71,894.11 Sch	hool of Energy Resources Directors Office	Ver Burg, Carrie	Assistant Director, Business Operations	11/26/2024
11/26/2024	Presidio Networked Solutions LLC	1	1	Juniper Renewal	1	93,967.35	93,967.35	93,967.35 Ent	terprise Infrastructure	Christensen, Margaux	Exec Administrator, IT Business Services	11/26/2024
11/27/2024	Ken Garff Cheyenne	1	1	2024 F-150 4x4 SuperCrew	0.5	57,815.00	28,907.50		E Center Powell	Boyles, Victoria	Dir, Business Operations	11/27/2024
11/27/2024	Ken Garff Cheyenne	1		2024 F-150 4x4 SuperCrew	0.5	57,815.00	28,907.50	57,815.00 Plai		Boyles, Victoria	Dir, Business Operations	11/27/2024
11/27/2024	Office Shop	1		Copier Services & Leasing Agreement- Copy & Print Center	1	25,400.00	25,400.00		py & Print Center	Watanabe, Rebecca	Business Manager	11/27/2024
11/27/2024	Office Shop	2	1	UW Copy & Print Center leasing & copy usage contact 2024-2025	1	37,600.00	37,600.00	63,000.00 Cop	py & Print Center	Watanabe, Rebecca	Business Manager	11/27/2024
12/02/2024	Vacuum Atmospheres Company	1	1	Part#: VAC SYS 69315; VAC 102282, System Assy, OMNI, 110 VAC, 60 Hz, 4P	1	72,751.50	72,751.50	72,751.50 VP Offi	for Research & Economic Development fice	Miller, Jamison	Dir, Business Operations	11/26/2024
12/04/2024	Enrollment Rx, LLC	1	1	Enrollment RX 02/01/2025-01/31/2026 Year 2 of 3	1	51,294.00	51,294.00		plications & Customer Relations	Christensen, Margaux	Exec Administrator, IT Business Services	12/04/2024
12/04/2024	Advanced Network Management, Inc	1	1	Isilon Renewal 3/25/2025-3/1/2026	1	137,945.67	137,945.67	-	terprise Infrastructure	Chavez, Jennifer	Interim Vice President/CIO	12/04/2024
12/04/2024	Oracle America, Inc.	1	1	ORACLE ANALYTICS 8/23/2024-8/22/2025 CPQ-2187557	0.15	250,707.00	250,707.00		terprise Infrastructure	Chavez, Jennifer Mai, William	Interim Vice President/CIO	12/04/2024
12/05/2024	Colorado/West Equipment, Inc Colorado/West Equipment, Inc	2	1	2025 Ford Endera B4 12-2 ADA Minibuse Vin#1FDFE4FN2RDD46641 2025 Ford Endera B4 12-2 ADA Minibuse	0.15	150,557.13 150,557.13	22,583.57		ansportation Services ansportation Services	Mai, William	Vice President, Campus Operations Vice President, Campus Operations	12/04/2024
		1	1	Vin#1FDFE4FN3RDD46969								
12/05/2024	Colorado/West Equipment, Inc	1	2	2025 Ford Endera B4 12-2 ADA Minibuse Vin#1FDFE4FN3RDD46969	0.85	150,557.13	127,973.56		ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
12/05/2024	Colorado/West Equipment, Inc	1	3	2025 Ford Endera B4 12-2 ADA Minibuse Vin#1FDFE4FN3RDD46969	0	150,557.13	0.00		ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
12/05/2024	Colorado/West Equipment, Inc	2	1	2025 Ford Endera B4 12-2 ADA Minibuse Vin#1FDFE4FN2RDD46641	0.85	150,557.13	127,973.56		ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
12/05/2024	Colorado/West Equipment, Inc	3	1	2025 Ford Endera B4 12-2 ADA Minibuse Vin#1FDFE4FNXRDD46788	0.85	150,557.13	127,973.56		ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
12/05/2024	Colorado/West Equipment, Inc	4	3	2025 Ford Endera B4 12-2 ADA Minibuse Vin#1FDFE4FN4RDD47001	0	150,557.13	0.00	Tra	ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
12/05/2024	Colorado/West Equipment, Inc	4	2	2025 Ford Endera B4 12-2 ADA Minibuse Vin#1FDFE4FN4RDD47001	0.15	150,557.13	22,583.57	Tra	ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
12/05/2024	Colorado/West Equipment, Inc	4	1	2025 Ford Endera B4 12-2 ADA Minibuse Vin#1FDFE4FN4RDD47001	0.85	150,557.13	127,973.56	Tra	ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
12/05/2024	Colorado/West Equipment, Inc	3	3	2025 Ford Endera B4 12-2 ADA Minibuse Vin#1FDFE4FNXRDD46788	0	150,557.13	0.00	Tra	ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
12/05/2024	Colorado/West Equipment, Inc	3	2	2025 Ford Endera B4 12-2 ADA Minibuse	0.15	150,557.13	22,583.57	Tra	ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
12/05/2024	Colorado/West Equipment, Inc	2	3	Vin#1FDFE4FNXRDD46788 2025 Ford Endera B4 12-2 ADA Minibuse	0	150,557.13	0.00	602,228.52 Tra	ansportation Services	Mai, William	Vice President, Campus Operations	12/04/2024
	l .	L		Vin#1FDFE4FN2RDD46641								

12/06/2024 United Healthcare Stu	United Healthcare Student Resources	1	1	Domestic Student Health Insurance - Invoice 24-005857-11-4	1	1,016,202.00	1,016,202.00		Risk Management Office	Seidel, Ed	President	12/06/2024
				DOM (Risk Management Approved)								
12/06/2024	United Healthcare Student Resources	2	1	International Student Health Insurance - Invoice 24-005857-11-4	1	731,228.00	731,228.00	1,747,430.00	Risk Management Office	Seidel, Ed	President	12/06/2024
				ITL (Risk Management Approved)								
12/06/2024	Casper College	1	1	FY24 CASPER COLLEGE UNION O&M REIMBURSEMENT	1	336,044.91	336,044.91	336,044.91	Real Estate Operations	Samp, Michael	Assoc VP for Univ Operations	12/06/2024
12/10/2024	Albany County Treasurer	1	1	2221 Grand Ave- Catering/ Conference Center 2024 Property	1	66,274.66	66,274.66	66,274.66	Catering and Events	Watanabe, Rebecca	Business Manager	12/10/2024
	' '			TAXES		·	·	•				
12/11/2024	Western Wildlife Research Collective, LLC	1	1	Analytical and technical support for the Corridor Mapping Team	1	72,000.00	72,000.00	72,000.00	Wyoming Coop Unit	Boyles, Victoria	Dir, Business Operations	12/11/2024
				and GPS movement studies (RMEF)								
12/12/2024	Loenbro LLC	1	1	ITC - 10' Manifold with flanged isometric piping (Option #2) per	1	88,485.00	88,485.00	88,485.00	School of Energy Resources Directors Office	Ferrell, Rachel	Dir, Business Operations	12/12/2024
				Proposal 1253, Rev. 2 dated December 2, 2024.								
12/13/2024	Native Range Capture Services Inc.	1	2	Capture services for Dr. Monteith.	1	78,230.00	78,230.00		Haub School of Environment & Natural	Koprowski, John	Professor/Dean/Wyo Excellence Chair	12/13/2024
									Resources			
12/13/2024	Native Range Capture Services Inc.	1	1	Capture services for Dr. Monteith.	1	25,000.00	25,000.00	103,230.00	Haub School of Environment & Natural	Koprowski, John	Professor/Dean/Wyo Excellence Chair	12/13/2024
									Resources			