CoLaborative for Intersectoral Modeling of the Earth System (CLIMES) Collaboration Space

Proposal team lead: Jason "Jake" Hawes, School of Computing

Team members:

- Stefan Rahimi, Department of Atmospheric Sciences and School of Computing
- Melissa Bukovsky, Haub School and Department of Atmospheric Sciences

Total budget requested: \$79,920.96

Project description

This project seeks funding to make functional the collaborative space assigned to the CoLaborative for Intersectoral Modeling of the Earth System (CLIMES). CLIMES is an interdisciplinary modeling team established as one of the sustainability deliverables from the most recent EpSCOR Track 1 grant, WyACT. The faculty team, composed of two climate modelers, one forest ecologist, one economist, and one systems scientist, is in the process of recruiting several post-doctoral research associates and graduate students, building out the research and educational capacity of the group. In addition to the three faculty members of the team already associated with the College, a number of the trainees will be hired through College of Engineering & Physical Science (CEPS) departments or schools or enrolled in CEPS programs. We are also applying for expanded funding via the NSF Growing Convergence Research program, a project that will explore solutions-making for wildfire challenges in tourism- and natural-amenity-dependent regions. This project, while highly relevant to the state of Wyoming, will be undermined by the lack of a common space for interdisciplinarity and innovation to take root. For this reason, we seek funding to retrofit the Crane Hall Cafeteria space assigned to CLIMES to make it a functional collaboration and office space.

Need for investment

CLIMES was established via investment in five new faculty positions from WyACT, the current Wyoming EpSCOR Track 1 grant. However, the current grant is approaching Year 4 of 5, and the leadership team is no longer making investments in CLIMES as one of the sustainability deliverables. As part of its establishment, the lab was granted space in the former Crane Hall Cafeteria. This is a large space that could serve as a hub for interdisciplinarity and innovative science for the entire College, but no funding is currently available to support this vision.

As shown in the figure, the space lacks a number of features of a functional collaboration space. First and foremost, there is no way to lock the space, making investment in other collaboration equipment like desks, computers, and visualization impossible. Interdisciplinarity, collaboration, and innovation are amplified by the opportunity to share space, exchange ideas, and explore common interests – but as of today, the newly hired graduate students and post-docs associated with CLIMES would be relegated to offices in their various departments, since no new furniture or electronics can be safely left in the collaboration space. For this reason, the majority of this grant is earmarked to simply build a wall and retrofit current exterior doors and windows. This would make it possible to lock the space, and the remaining budget is dedicated to outfitting the secured workspace for interdisciplinary post-docs and graduate students. Remaining funds are allocated to conference room equipment, desks for trainees, and room partitioning.

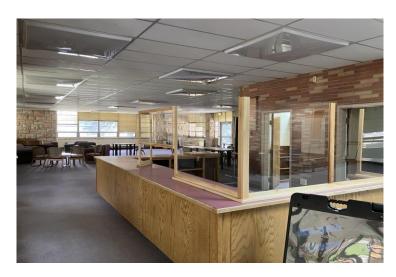


Figure 1 – CEPS Collaboration Space as viewed from the always unlocked hallway to Crane Hall. This hallway must be kept unlocked at all times to allow access to mailboxes to the right, out of frame. We have failed to capitalize on the opportunity presented by this collaboration space, since investment in any new materials would be available to "walk away" with anyone walking through Crane Hall.

Relevance to CEPS & Tier 1 Engineering Initiative – Research (Goal 2) and Education (Goal 1)

Faced with increasing complexity in built, social, and natural systems, the scientific enterprise increasingly looks to interdisciplinarity as a tool for better understanding the world around us. This is reflected in funding programs – as reported by the NSF, they "[give] high priority to research that is interdisciplinary - transcending the scope of a single discipline or program." CLIMES is part of CEPS' and UW's response to that challenge, a custom-built research team tasked with solving challenging problems in the state of Wyoming and beyond through interdisciplinary science, especially through integrated system modeling.

CEPS is well-positioned to advance interdisciplinarity in engineering and the physical sciences. By its very nature it holds a distinct advantage over many colleges of engineering or science nationally, where faculty face administrative and logistical hurdles in building collaborations across their siloed colleges. This means that CLIMES can serve an important role in advancing the Tier 1 Engineering Initiative, offering a fertile space for training the next generation of scientists, for whom literacy in other fields or even truly interdisciplinary expertise is likely to prove vital. Furthermore, NSF Growing Convergence Research grants, the current focus of the team, focus on establishing long-lasting teams that can serve as centers of interdisciplinary innovation for years to come. While research excellence is part of this mission, the program also takes seriously the challenge of designing courses and programs for interdisciplinary science and engineering. To meet these expectations, the team is planning to design interdisciplinary coursework in environmental systems science at the undergraduate and graduate levels.

¹ https://new.nsf.gov/funding/learn/research-types/learn-about-interdisciplinary-research

² https://new.nsf.gov/funding/opportunities/gcr-growing-convergence-research

CEPS Infrastructure Proposal Budget

Tax rate: 7.0%

Total: \$ 79,920.96 Shipping from ODP Business = Free

Item	Total Cost	Unit cost # red	qd Tax	Link
Room securitization, etc.	\$ 65,000.0	0 \$ 65,000.00	1	RFE
Desk chairs	\$ 1,604.9	1 187.49	8 \$ 104.99	ALPHA HOME Ergonomic Mesh Mid Back Office Task Chair Black - ODP Business Solutions
Desks	\$ 1,146.9	5 133.99	8 \$ 75.03	https://www.odpbusiness.com/a/products/8345919/South-Shore-Axess-41W-Desk-With/
Conference table	\$ 2,972.7	7 2778.29	1 \$ 194.48	https://www.odpbusiness.com/a/products/5369098/Regency-Legacy-Melamine-Oval-Conference-Table/
Conference chairs	\$ 2,674.8	9 249.99	10 \$ 174.99	WorkPro 1000 Series Ergonomic MeshMesh Mid Back Task Office Chair BlackBlack BIFMA Compliant - ODP Business Solutions
Whiteboard partitions	\$ 1,467.5	8 457.19	3 \$ 96.01	Flash Furniture Mobile Magnetic Whiteboard Partition With Lockable Casters 72 x 24 White - ODP Business Solutions
Partitions	\$ 3,723.4	7 289.99	12 \$ 243.59	HON Basyx Verse Panel System 60 H x 61 W Gray - ODP Business Solutions
Large cabinet	\$ 748.9	8 349.99	2 \$ 49.00	Realspace 36 W Steel 5 Shelf Cabinet Black - ODP Business Solutions
Desk surge protectors	\$ 188.2	3 21.99	8 \$ 12.31	GE 6 Outlet Surge Protector 6 Cord Black - ODP Business Solutions
				Tripp Lite 6 Outlet Surge Protector Power Strip 4 USB Ports 6 ft. Cord 1080 Joules Diagnostic LED Black Housing Surge protector
Conference room surge protector	\$ 45.0	4 42.09	1 \$ 2.95	AC 120 V 1800 Watt output connectors 6 6 ft cord black - ODP Business Solutions
Cord concealers	\$ 348.1	2 21.69	15 \$ 22.77	Belkin 6 Cord Concealer Gray - ODP Business Solutions
	\$ -			
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Budget Justification

Construction and securitization - \$65,000

Facilities estimates that the cost to secure the space for more robust use is \$65,000. This is a prerequisite for any other purchases, since the current configuration allows anyone to walk into the space at any time. This makes it unsuitable for long-term use as a collaboration space, whether that be in the form of a convening area or office area. The construction plan would leave most of the room open, allowing us to use temporary partitions to configure offices, convening space, and conferencing space at a relatively low cost.

Conference and office space equipment - \$14,920.96

Remaining budget is allocated to making the space suitable for immediate use as a collaboration space. This includes desks for trainees and a conference table. These separate uses will be divided by temporary partitions, allowing for reconfiguration in the case of large gatherings or novel future uses. The space already has a large amount of lounge furniture from its past as a student area, and this furniture will be retained and upcycled (manually refurbished) to support informal gatherings, brainstorming sessions, and broader interdisciplinary community building. The current budget also includes miscellaneous storage equipment and electrical cords to make the space functional.

Price estimates are from the School of Computing's typical source for furniture, ODP Business. Tax is included, and shipping is free. We will plan to be flexible on the exact nature of furniture purchased, since the priority is room securitization, and the estimate above is just that – an estimate.



UW Operations 1000 E. University Ave, Dept 3227 Laramie, WY 82071

Phone 307-766-6225 Fax: 307-766-4040

Date Received: 12.5.24

AiM Project #:

Date

25-12315

REQUEST FOR ESTIMATE

PART I:

INSTRUCTIONS FOR PART I (completed by department):

1. Complete ALL fields in Part I.

Admin Authorization Required

- 2. Obtain signature of authorizing departmental authority. Email signature is acceptable.
- 3. Forward to Heather Earl (hearl@uwyo.edu) at the Service Building. For additional information, call 766-6883.
- 4. A UW Operations representative will contact originator with additional information.

Request Da	te:		Desired Project Completion Date:			Before 5/31/25	
Originator:		Jason Hawes	Email Address:			jhawes@uwyo.edu	
Department	Name:	Haub School & Sch	Phone Number:			574-343-9135	
	n – Building:	Crane Hall	Job Location - Room:			Former res hall common space	
Job Descrip	otion:	This space has been	assigned to the inter	disciplinary o	ollaboratio	on teams CL	IMES and CCWP.
However, th	e space as it exis	sts has no way of beir	g secured, which ma	akes it difficu	It to leave	any equipme	ent or investment in
improved co	llaboration spac	es. We'd like to work	with facilities to de	velop a way t	o have a lo	cking door	nto the main space.
	3	Department Signatur	Kopeov A	L Da	te: <u>Decen</u>	ber 5, 2024	
PART II	[:		ESTIMATED COSTS			Customer Contacted Date:	
	y UW Operation	ns)			L	Customer	ontacted Date.
Estimator			Date of	f Estimate:	12/1	0/24	Estimate is valid for 60 days
	Phone Number:		Estima	te Amount:	4/	cr.	Budgetary purposes only
	Comments:	See attached			70	5,0	
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Capital	1		artment will be notif		is classifie		l project)
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Associate VP, UW Operations