7-8-2021

IMPACT UMaine Research, July 2021

Office of the Vice President for Research

Dean of the Graduate School

Maine's Public Universities
UNIVERSITY OF MAINE SYSTEM

Matthew Revitt <matthew.revitt@maine.edu>

Announcing ARCSIM, the importance of Research Data Management, designing for right whales and more

1 message

UMaine Research <research@maine.edu> Thu, Jul 8, 2021 at 9:37 AM
Reply-To: UMaine Research <research@maine.edu>
To: matthew.revitt@maine.edu

July 2021

Office of the Vice President for Research and Dean of the Graduate School

Announcement

New research computing initiative combines services across UMaine

The new University of Maine Advanced Research Computing, Security, and Information Management (ARCSIM) unit is dedicated to supporting the needs of the UMaine research community and its collaborators in their pursuit of a range of technological solutions. UMaine ARCSIM is associated with CORE and part of central services overseen by the Office of the Vice President for Research and Dean of

the Graduate School.

Read More

Featured Stories

How Research Data Management benefits everyone through open access

Read More

UMaine researcher studies conflict and violent extremism around the world

Read More

Landazuri helps translate the first recorded accounts of El Niño

Read More

EPIC students redesign lobster traps to save right whales

Read More

Announcements

- Recording of UMaine Humanities event now available
- UMSpaceSafe app for documenting research space use to be discontinued
- The UMaine Artificial Intelligence (AI) and Cyber Security (CS) Initiative Committee invites you to complete a short survey on your AI/CS work
- CUGR Talk- What is CUGR? Ever wondered what CUGR is? Come find out! Bring your questions.
- Apply for a UMaine-NU Seed Grant (Round 2), by July 30
- NSF/Engineering GERMINATION program invites proposals for grant projects

---

UMaine News: Research Stories and More

Funding Opportunities **External Grants Awarded**

Facebook **Instagram** **Twitter** **Website** **Email**

Our mailing address is:
Office of the Vice President for Research and Dean of the Graduate School at UMaine
5703 Alumni Hall Rm 201
Orono, ME 04469-5703

THE UNIVERSITY OF MAINE

New research computing initiative combines services across UMaine

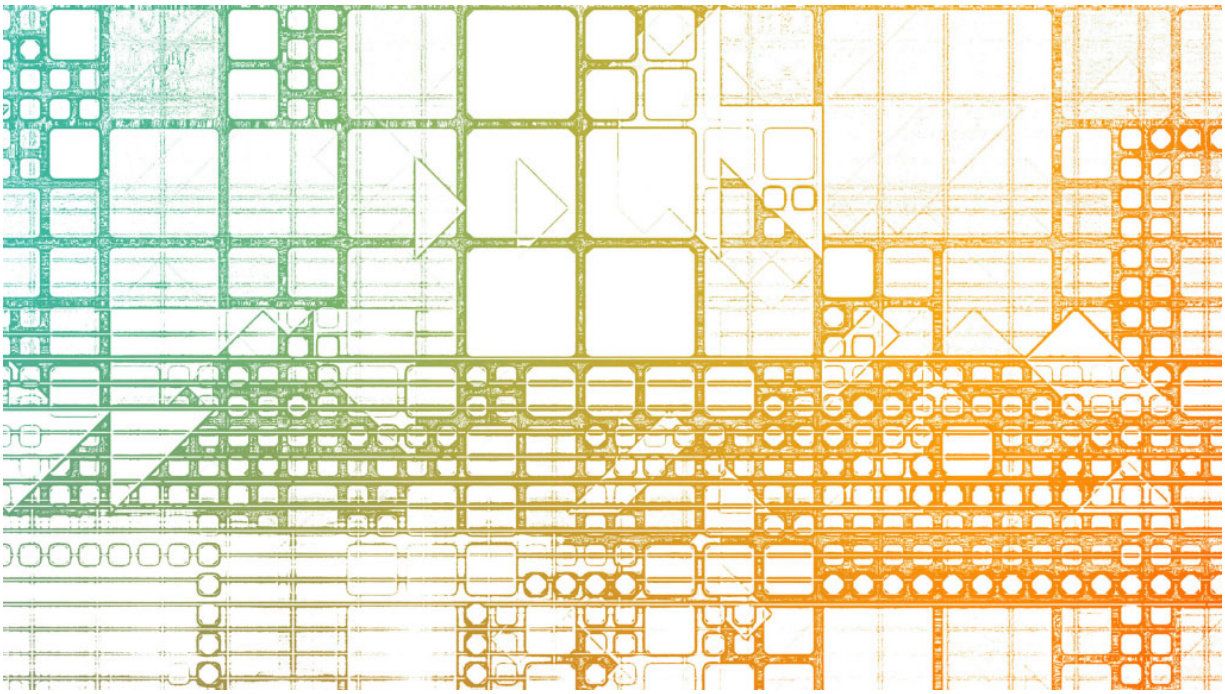
June 30, 2021 Announcements

Launched in Spring 2019, the Advanced Research Computing (ARC) initiative was created to support the unique research computing needs of faculty and other researchers at the University of Maine. With ARC's successful track record over the past two years in addressing these needs, and in an effort to create even greater synergy and coordination, ARC has been merged with the existing Research Information Management (RIM), and a research data security support component has also been added to their set of offered services.

The new University of Maine Advanced Research Computing, Security, and Information Management (ARCSIM) unit is dedicated to supporting the needs of the UMaine research community and its collaborators in their pursuit of a range of technological solutions. UMaine ARCSIM is associated with the Coordinated Operating Research Entities or CORE and part of central services overseen by the Office of the Vice President for Research and Dean of the Graduate School.

The newly merged unit strives to provide its research user community the best possible service in the most timely and cost-effective manner. Its primary goal is to support the advancement of research and discoveries of global impact and local relevance that are enabled through technological solutions.

Contact: research@maine.edu



How Research Data Management benefits everyone through open access

July 7, 2021 Program Highlight, Research News

Research Data Management (RDM) is a systematic and planned approach to the entire life cycle of scholarly data: from the collection, creation, and/or observation to documentation, storage, and sharing. All researchers engage in RDM in some capacity, but the better a project's research data is managed, the better the impact the project will have beyond its duration of work.

Making research data accessible to the public and other scholars increases the integrity of the research and contributes to building a greater body of knowledge, a noble cause for every scholar. "Public access is a natural continuation of an academic institution's research mission," says Shane Moeykens, director of Advanced Research Computing, Security, and Information Management (ARCSIM) at UMaine. "Part of that continuum is making sure it's not just writing a report about the information, but making the information itself available to the broader community."

Open access to research data increases the visibility of a researcher's work, advances the field of discipline, and ultimately enhances public trust. In some cases making research data open to access is required. The National Science Foundation's Proposal & Award Policies & Procedures Guide (PAPPG), for example, clearly states that "investigators are expected to share with other researchers, at no more than incremental cost and within a reasonable time, the primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF grants." This means that researchers with NSF funding must make project materials available to others.

Research data extends beyond measurements and publications and should be thought of as everything utilized in a project. Lab notebooks, archival photos taken during a library visit, survey results, audio recordings, samples, and film clips are just some of the possibilities of what can be considered research data.

The most common ways to make research outputs available are through data repositories. UMaine has two tools available: DigitalCommons managed by Fogler Library and Dataverse facilitated by the Advanced Computing Group and the University of Maine System IT organization. DigitalCommons primarily aggregates publications and other research and creative products of a project. Its ease of use and aggregation saves time for researchers looking to find the history of research done on a certain topic. Dataverse contains the research data itself, and it is

particularly useful for large projects with multiple contributors to place all their work in one place. Any researcher at UMaine can seek advice from the Office of Research Administration, the Fogler Library, and the Advanced Computing Group to make a plan for managing their research data when applying for funding. Ami Gaspar, an outreach specialist for the Advanced Computing Group, also runs useful seminars on research data management for researchers at any career level.

"We often think that if we publish in books or journals, we must give our intellectual property away to those publishers," says Jen Bonnet, social science and humanities reference librarian at Fogler Library. "Authors and publishers now have more options for what they can do with their research outputs. A journal article is one output, data would be another output. Increasingly, publishers will let you make your article and the data associated with that article available in your open access institutional repository, within a certain timeframe." If open access to research data is required by a grant funding the project the negotiation can be easier between the researcher and publisher. Some grants could also require placing research data in national or international repositories. "That doesn't mean we're not going to work locally with Dataverse and other institutional alternatives," says Moeykens. "It's really a spectrum of activity."

While research projects will vary in what they contain and require, the overarching goal is to lower the bar and make it easier for people to gain access to the project's information in its raw form. "Faculty strive to be in compliance today with the federal requirements, but is it as easy as it could be?" Moeykens explains. "There's always more that can be done. Over time, there could be new portals developed, and new institutional practices around existing tools."

Derivative research products are becoming increasingly part of federally funded projects, where the research contributes back to the public by creating a user-friendly tool that makes its data digestible. ShellGIS is an outstanding example of a derivative decision support tool, directly extending federally sponsored data and work to the general public in a way that benefits the public. The tool was developed under Damian Brady, associate professor at the Darling Marine Center for the Sustainable Ecological Aquaculture Network (SEANET), with Meggan Dwyer as the research coordinator for the project.

Even if a project does not result in a derivative tool, other things matter in making research data accessible. Version control and descriptive naming conventions throughout a project's duration help track changes in a project. "There's so much interdisciplinary and collaborative work happening on campus that being able to have an audience that's outside your field understand at least what each of your files contains is a true kindness," says Bonnet. "Best practices suggest that researchers be as descriptive as possible, and if possible, have a guiding document so that people going through their data files can make sense of what's there, why it's there, and how it connects." For the general public, it's important to avoid jargon in keywords and descriptions.

File formats are also important for the long run, as proprietary formats may no longer be supported. For instance, formatting the data file as a CSV instead of an Excel file ensures access to a wider audience. PDFs can also be formatted as XML or HTML so that readers will not require software to read them. More on best practices for research data management can be found on Fogler Library's extensive online resource.

Contact: research@maine.edu

Written by Clarisa Diaz

UMaine researcher studies conflict and violent extremism around the world

July 6, 2021 Faculty Spotlight, Research News

Bill Farrell looks at the dynamics of conflict and violent extremism. He has conducted field research in countries across Central Asia, the Caucasus region, and Africa. He has met with government officials, community leaders, stakeholders, and an array of people who have had family members and friends mobilize to violent extremism.

Farrell is an assistant professor at UMaine's School of Policy and International Affairs, where he teaches and conducts research on issues of stability and violent extremism, with a particular interest in Salafi jihadi organizations.

A graduate of Tufts University and of the Fletcher School of Law and Diplomacy, Farrell received his Ph.D. from the University of Maine. His doctoral research comparatively examined mobilization patterns and orientation of local violent extremist organizations in the countries of Central Asia and the Caucasus, noting the change in their focus, once engaged in external jihadi theatres, such as Afghanistan and Syria.

Farrell's research is rooted in an ethnographic approach. He spends time interviewing and gaining insights into different people's experiences, perspectives, and thought processes. "I remember one person saying 'my relative went off to Syria to fight, but he's proud of our country. He loves our country. He would never do any harm here. But he believes that the Assad regime is not doing positive things for the Muslim people'..."

"In doing this research, you learn an awful lot about people's mindset," he explains. "You suddenly recognize that it's not as black and white as you might otherwise think. It's not simply terrorist versus non-terrorist. It's perhaps somebody who thinks they're a freedom fighter or they're doing something heroic to save their families."

Navigating the details of these cases is challenging. "It can be eye-opening at times. It can also be quite sad at times when we've talked to people who are confused by the fact that their friend was killed in Syria, and they don't understand why he went there or what he was trying to do. You have the responsibility for not inflaming tensions and not making people feel bad, but trying to clinically understand their story," says Farrell.

Farrell has worked with international donor agencies, non-governmental organizations, and the United States Government for more than two decades. In addition to his role at UMaine, Farrell is also Principal Consultant at Orono-based Swordfish Consulting International, LLC. At Swordfish he works globally on situation analysis, strategy formulation, and influence mapping in fragile or transitioning countries. He uses his expertise in conflict and violent extremism to help guide strategy and analysis with government, multilateral, and private sector clients.

Farrell has been focusing on topics of violence and instability for the majority of his professional and academic career. He is interested in what orients people toward violence and ways in which countries can form policy on interventions that might be taken to prevent the spread of violence or help to roll it back. For example, he has just returned from the Caucasus, where he worked with Georgian and Abkhazian civil society organizations on enhanced conflict transformation and peacebuilding skills.

Contact: research@maine.edu

Written by Ali Tobey

Bill Farrell is an assistant professor at UMaine's School of Policy and International Affairs.

Courtesy Alberto Lopez

Landazuri helps translate the first recorded accounts of El Niño

July 6, 2021 Faculty Spotlight, Grad Student Spotlight, Research News

Examining history can reveal some of the same problems faced today, along with how to cope with them. On the northern coast of Peru, a hot spot for El Niño events, Andean indigenous groups adapted for thousands of years through methods like cycling farming to higher ground. Some of these agricultural methods were previously revealed by translating part of a survey conducted by Francsico de Alcocer, an inspector sent by the Spanish (who were colonizing the area at the time) to record eye-witness accounts after a devastating El Niño event in 1578.

Only half of the document is preserved but there still remains much to be translated and analyzed. This July, the project will resume with new life, in the hands of climate science graduate student Heather Landazuri, who is tasked with translating the entire document from 16th century Spanish to English.

Dan Sandweiss, professor of anthropology and Quaternary and climate studies, recently received support through a McGillicuddy Humanities Center grant to build on his earlier research into the Alcocer's documents which took place in the early 1990s with then anthropology student, Wendy Copson. Sandweiss and Landazuri are now collaborating on the project.

The approximately 300-page document is a complex social and cultural record of the divide between the Spanish and native populations. "At the time the indigenous population was relocated to what I would consider kind of like a reservation, they're called 'reducciones,' centralized settlements where they lived and worked to pay tribute to their Spanish lords," explains Landazuri.

In 1580, two years after the El Niño event, the native population asked for relief from tribute payment to recover from the disaster. But the Spanish wanted to rebuild infrastructure that would benefit the production of crops like cotton and corn, which were valuable for the Spanish. “It almost plays out like a struggle between a labor union and a big corporation,” says Landazuri.

Courtesy Alberto LopezDan Sandweiss, professor of anthropology and Quaternary and climate studies, recently received support through a McGillicuddy Humanities Center faculty grant and is collaborating with Landazuri on his project.

Alcocer conducted two questionnaires, one for Spanish lords, the ‘encomenderos,’ and one for native lords, the ‘caciques,’ resulting in biased survey results. “They ask essentially the same questions, but they ask them very differently,” describes Sandweiss. “For the native lords, the questions are fairly neutral: ‘What did you lose? How did you respond? What got washed away? They were straightforward questions. The questions for the Spanish lords were things like: ‘Is it not true that these natives are just lazy and don’t want to rebuild, that they don’t want to do the work?’”

View to the north across a typical irrigated middle valley on the Peruvian coast. 4,000 year old archaeological mounds appear in the foreground and on the terrace in the background.

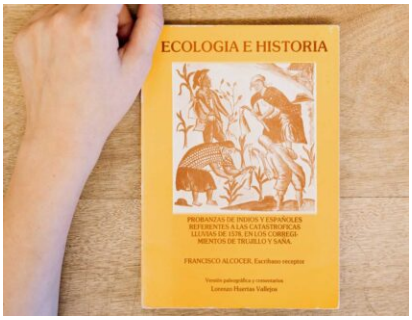
Spanish failure to learn from the indigenous population prevented them from adapting to their environment during an El Niño event. The native population knew that living in the path of the floods was a bad idea and they understood that continuing to grow in floodways would be fruitless until the event was over. They would rather rebuild their local communities to recover from the disaster and possibly plant above the floodplain. “A priest who was a witness for one of the native Lords, recounts how natives told him that the fields had rotted away from the rain, they replanted and the fields rotted again. They replanted again and there was a plague of mice that were as big as medium-sized rabbits,” says Sandweiss. “He didn’t believe it, so he went out in the fields and saw piles of hundreds of dead giant mice in the fields.”

The document reveals migration patterns and even relocation, as indigenous populations moved as far north as Quito, Ecuador and as far south as Lima, as well as into the Peruvian highlands. People also changed their diets, a topic of specific interest to Landazuri who is also studying changes to marine bird populations during El Niño events. “We expect to see an abundance of rainfall, flooding, landslides, those kinds of big changes [in the document]. I hope that there’s some sort of allusion to what it looks like out on the beach,” says Landazuri. “Are there tons of birds or are the birds mysteriously gone? Is there any kind of discussion about the fishing being poor at this time?”

During periods of famine, people were forced to eat lizards, grasses, and foraged foods to survive. “Muscovy duck is an important indigenous domestic bird that was also eaten. Are there more of those being eaten than marine birds?” asks Landazuri. “Is there more reliance on European import than on what’s locally around?” Interpreting the responses is a balancing act between determining what was colonialism and what was a loss of resources due to the El Niño event.

Looking west to the Pacific Ocean across a typical irrigated Peruvian coastal valley. A late prehispanic mound is located under the large cross.

Local expert Oswaldo Chozo Capuñay has worked with Sandweiss in the Lambayeque Valley of Túcume, where the most number of the eye-witness accounts are recorded, and has lived through three major El Niños in that valley. He will ask traditional farmers in Peru how they have responded to these events. What he observes about their responses today, will help trace methods back in time. “Heather’s going to be translating the whole thing. And then together we’ll be working on what these coping strategies are, how they fit in, which ones we can see archeologically from pre-Colombian times to make the link stronger,” said Sandweiss. The team is truly interdisciplinary, combining Climate Science and Anthropology to uncover and analyze what witnesses might have to say in the document.



Courtesy Alberto LopezSurvey by Francisco Alcocer, the “Ecologia e historia” provides an early eyewitness account of El Niño events.

Because Alcocer’s survey was ultimately meant for the Spanish Crown, the indigenous perspective is not given justice through them. “It’s primarily one-sided, it’s not as expansive as one would hope, but in between, you can find something,” says Landazuri. Sandweiss concurs, Alcocer’s survey is, among other things, “a document of the failure of Spanish colonial policy. And the failure is built around not listening to indigenous knowledge. That’s clear,” says Sandweiss. “If [the Spanish] had talked to people and taken them seriously, they would not have placed the ‘reducción’ settlements where they did. Clearly, they would not have had to send somebody up there to find out what went on if they had paid attention. It would not have been as devastating.”

Despite the social and cultural divide between the Spanish and native populations, observations can be read about ecological and environmental aspects at the time. “Archival documents can be a powerful way to learn about past weather patterns,” says Landazuri. “It reminds everyone that these are extremely important sources for more than just the one thing, or more than just telling one story about a labor uprising and requests for aid, imperialism and colonialism—there’s more to it than that. We can look at resilience. We can look at environmental change. We can look at coping.” The team hopes to publish some of their new findings by next year.

Contact: research@maine.edu

Written by Clarisa Diaz

EPIC students redesign lobster traps to save right whales

July 6, 2021 Program Highlight, Research News

A team of students making up the first cohort at the UMaine Experiential Learning Innovation Central (EPIC) redesigned lobster trapping mechanisms in order to protect right whales.

Guided by faculty mentors Jason Bolton, John Belding, and Ali Abedi, the team included Hannah Milne, a first-year chemical engineering student; Alexis Bader and Benjamin Swanson, students both studying mechanical engineering.

According to the team, right whales are getting tangled in the lobster trap ropes because they are color blind and cannot see any color except bright red. Given that the North Atlantic right whale is endangered, with fewer than 400 left in the wild, preventing them from getting tangled is crucial to their survival.

“Our goal is to create an effective solution to prevent the entanglement of the right whales that can be completed in 12 months so that the lobstermen don’t lose out,” says Milne. The students spoke to lobstermen to understand how they fish, to help them think of multiple ways to tackle the problem. “We had an out-of-the-box idea that was an electromagnetic retrieval, but putting a giant magnet on a boat is not conducive. And when you have to retrieve lobster traps in 500 feet deep water, a magnet is not going to work,” says Bader.

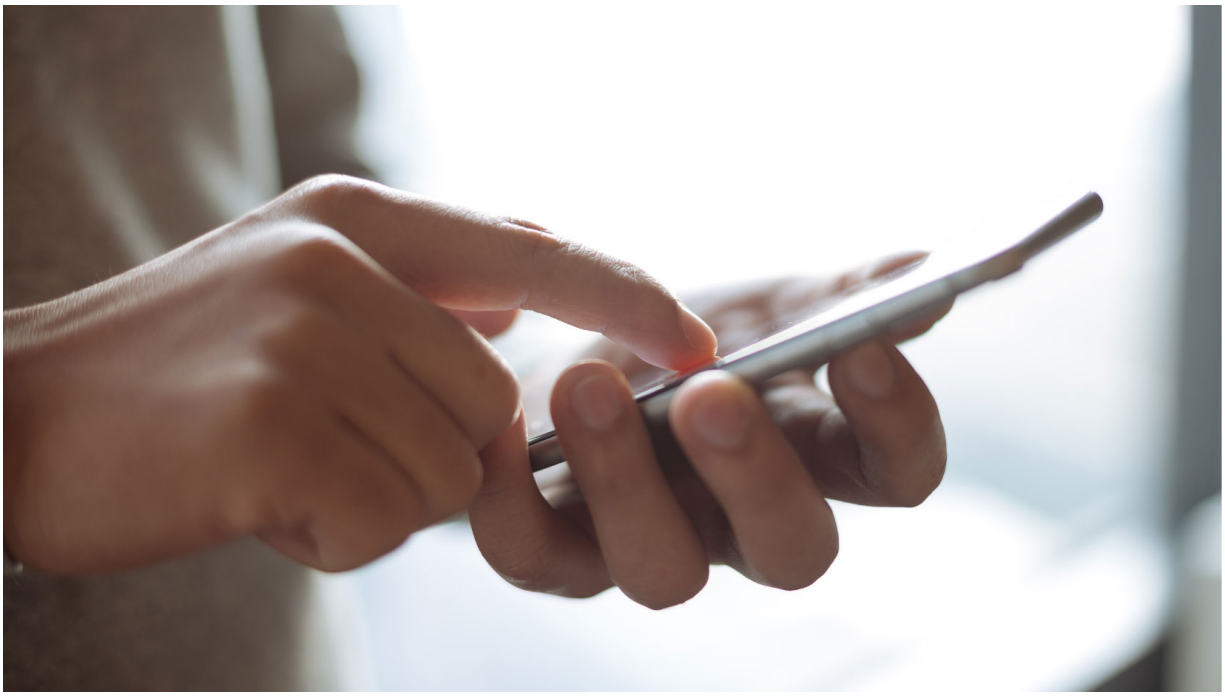
The students had four other ideas including an airbag deployment system, making a flotation device to link several traps together, but the weight would need to be counteracted with buoyancy. The students arrived at their proposed design, which utilizes a timed-release mechanism for a lobster trap. “It’s a mechanical timer that signals release depending on a lapsed time,” describes Bader. “Say two to three days, depending on the lobsterman’s period that they leave the traps out, a gear would eventually shift and release extra rope that would then allow the buoy to travel up to the surface.”

Swanson explains the mechanism in more detail. “It’s really a gearbox. There’s an input motor spinning off of the battery to the translation of gears. It will go to an output gear that will rotate once every two to three days, that will give enough time for the lobster traps we set to have the lobsters crawl in and get trapped.” Once that mechanical trigger goes off it will trigger a release hook, which will release the rope from a wound-up coil on the ocean floor, allowing the buoy to float to the surface. The buoy will be spotted on the surface and the lobsterman can come to collect the traps.

The students' work includes multiple prototypes and interviews to provide a solid start if the project continues beyond the course. "This would be our original design that we could take to industry leaders and see whether this design would be feasible and then get that feedback," says Swanson. The interdisciplinary, collaborative nature of EPIC is also what drew Bader to take the course. "This seemed interesting to try and solve using aspects of mechanical engineering and the innovative process was very interesting in my opinion." For Milne, she chose to work on this project specifically because of her love for whales. "I was interested in helping them out, it's a project that I want to do the most."

Contact: research@maine.edu

Written by Clarisa Diaz



UMSpaceSafe app for documenting research space use to be discontinued

June 30, 2021 Announcements

With the recent changes to UMS COVID-19 guidelines, the UMSpaceSafe app is being decommissioned.

UMSafeSpace was a tool to document research space use for the purpose of managing and mitigating hazards, including potential COVID-19 exposure. The Office of the Vice President of Research and Dean of the Graduate School requested during the academic year 2020-2021 that all UMaine/UMM personnel and students conducting institutionally associated research use this tool when accessing and departing research associated spaces on and off-campus, including campus labs, research common areas, field sites, farms, and non-UMaine/UMM research centers.

The app will no longer be available for use after June 30, 2021. All data that has been collected by the app will be permanently deleted.

Thank you for your use of the UMSpaceSafe app to keep our community safe.

If you have any questions or concerns, please contact tammy.crosby@maine.edu.

Competition Details

University of Maine and Northeastern University Seed Grant Program (Round 2)

Dates

Internal Submission Deadline:	Friday, July 30, 2021 at 4:30 PM

Details

Administrator(s):	Saul Allen (Owner)
Category:	University of Maine and Northeastern University
Cycle:	FY 2022
Discipline Subject/Area:	Priority Areas: Artificial Intelligence; Earth and Climate Sciences; Health and Life Sciences; Manufacturing; Marine Sciences
Total Funding:	$50,000
Funding Source(s):	$50,000 - Unspecified

Description

University of Maine and Northeastern University Seed Grant Program

Overview:

The University of Maine and Northeastern University are pleased to announce the continuation of our joint competitive seed grant program to facilitate research collaborations among and between our research communities.

Full-time faculty and professional research staff/scientists are invited to submit proposals in accordance with the guidelines and timeline described in this program announcement. Each proposal must include at least one faculty member from each University in any field or discipline. Interdisciplinary proposals are encouraged, and proposals are sought that target any of the following research priority areas, or combinations thereof:

- Artificial Intelligence
- Earth and Climate Sciences
- Health and Life Sciences
- Manufacturing
- Marine sciences

Proposal Guidelines:

Applicants should include the following in their application package:

1. A description of their proposed study in a three-page concept paper (references do not count against the three-page concept paper limit and can be included on a separate page). In these concept papers, applicants are required to identify specific extramural funding programs that will be pursued and include clear timelines for outcomes and deliverables;
2. A one-page budget and justification;
3. Biosketches for all team members (using NSF or NIH formats).

Note: Letters of support or collaboration should not be included in the application package.

Budget:

Up to $50,000 in funding will be available for each project, for the award period 10/1/21- 9/30/22. It is anticipated that three to five awards will be made in the FY 2022 round. Funds must be budgeted for and expended evenly between the two universities. Funding may not be requested for faculty salary support. Salary support for professional research staff/scientists is allowed. Graduate students who are included on the grant must be named, and their CVs included with the proposal. Tuition is not an allowable charge.

Evaluation Criteria:

A joint committee composed of research development staff and faculty from both universities will review and rank proposals based on the criteria listed below. The committee will provide recommendations to the Vice President for Research and Dean of the Graduate School at UMaine and the Senior Vice Provost for Research at NU, who will make the final funding decisions. Specific review criteria include:

- Overall scientific impact/merit
- Investigators/Team
- Innovation/Potential for success
- Importance to the UMaine/NU research partnership
- Budget feasibility

Timeline:

Applications are due by 4:30 PM on Friday, July 30, 2021. Proposals must be submitted via the UMaine InfoReady Portal (accessible at https://umaine.infoready4.com/). Requests for technical assistance with submitting can be directed to Saul Allen (saul.allen@maine.edu). Both UMaine and NU-affiliated faculty and researchers can access the application portal. Those who have not applied through InfoReady previously will need to create an account in InfoReady prior to submitting their application.

It is anticipated that decisions will be communicated in September and selected projects will have performance periods spanning 10/1/2021 – 9/30/2022. If this schedule changes due to proposal volume and/or review panel deliberation considerations, applicants will be notified by program staff.

Upon request, introductions and facilitated meetings among and between UMaine and NU faculty will be coordinated by the Offices of Research Development at both institutions. Faculty are encouraged to contact Directors Jason Charland (jason.charland@maine.edu) at UMaine and Karen Drew (K.Drew@northeastern.edu) at Northeastern to request an introduction. Directors Drew and Charland will serve as the joint single point of contact both pre- and post-award, ensuring equitable project implementation and support.

Personnel (Research Staff, Postdoctoral Researchers, Graduate Students) *submit biosketch for each individual listed	**Funding Requested (inclusive of fringe, if applicable)**	**Budget Justification**	**Place of Expenditures (UMaine or Northeastern University)**
Travel	**Funding Requested**	**Budget Justification**	**Place of Expenditures**
Other Direct Research Costs (materials, supplies, non-capital equipment)	**Funding Requested**	**Budget Justification**	**Place of Expenditures**
		Total Funding Requested (Northeastern University)	
		Total Funding Requested (UMaine)	
		Total Funding Requested (Combined)	

Please provide your project budget in the following format, adding sufficient detail in the budget justification to describe the roles and responsibilities of supported individuals as well as the use or function of requested other costs. Add additional rows if necessary. Funds should be apportioned evenly between the two institutions, with each university's $25K contribution remaining on its campus. Only direct costs are allowable.

Project Title:

Submitting PIs:

Competition Details

University of Maine and Northeastern University Seed Grant Program (Round 2)

Dates

Internal Submission Deadline:	Friday, July 30, 2021 at 4:30 PM

Details

Administrator(s):	Saul Allen (Owner)
Category:	University of Maine and Northeastern University
Cycle:	FY 2022
Discipline Subject/Area:	Priority Areas: Artificial Intelligence; Earth and Climate Sciences; Health and Life Sciences; Manufacturing; Marine Sciences
Total Funding:	$50,000
Funding Source(s):	$50,000 - Unspecified

Description

University of Maine and Northeastern University Seed Grant Program

Overview:

The University of Maine and Northeastern University are pleased to announce the continuation of our joint competitive seed grant program to facilitate research collaborations among and between our research communities.

Full-time faculty and professional research staff/scientists are invited to submit proposals in accordance with the guidelines and timeline described in this program announcement. Each proposal must include at least one faculty member from each University in any field or discipline. Interdisciplinary proposals are encouraged, and proposals are sought that target any of the following research priority areas, or combinations thereof:

- Artificial Intelligence
- Earth and Climate Sciences
- Health and Life Sciences
- Manufacturing
- Marine sciences

Proposal Guidelines:

Applicants should include the following in their application package:

1. A description of their proposed study in a three-page concept paper (references do not count against the three-page concept paper limit and can be included on a separate page). In these concept papers, applicants are required to identify specific extramural funding programs that will be pursued and include clear timelines for outcomes and deliverables;
2. A one-page budget and justification;
3. Biosketches for all team members (using NSF or NIH formats).

Note: Letters of support or collaboration should not be included in the application package.

Budget:

Up to $50,000 in funding will be available for each project, for the award period 10/1/21- 9/30/22. It is anticipated that three to five awards will be made in the FY 2022 round. Funds must be budgeted for and expended evenly between the two universities. Funding may not be requested for faculty salary support. Salary support for professional research staff/scientists is allowed. Graduate students who are included on the grant must be named, and their CVs included with the proposal. Tuition is not an allowable charge.

Evaluation Criteria:

A joint committee composed of research development staff and faculty from both universities will review and rank proposals based on the criteria listed below. The committee will provide recommendations to the Vice President for Research and Dean of the Graduate School at UMaine and the Senior Vice Provost for Research at NU, who will make the final funding decisions. Specific review criteria include:

- Overall scientific impact/merit
- Investigators/Team
- Innovation/Potential for success
- Importance to the UMaine/NU research partnership
- Budget feasibility

Timeline:

Applications are due by 4:30 PM on Friday, July 30, 2021. Proposals must be submitted via the UMaine InfoReady Portal (accessible at https://umaine.infoready4.com/). Requests for technical assistance with submitting can be directed to Saul Allen (saul.allen@maine.edu). Both UMaine and NU-affiliated faculty and researchers can access the application portal. Those who have not applied through InfoReady previously will need to create an account in InfoReady prior to submitting their application.

It is anticipated that decisions will be communicated in September and selected projects will have performance periods spanning 10/1/2021 – 9/30/2022. If this schedule changes due to proposal volume and/or review panel deliberation considerations, applicants will be notified by program staff.

Upon request, introductions and facilitated meetings among and between UMaine and NU faculty will be coordinated by the Offices of Research Development at both institutions. Faculty are encouraged to contact Directors Jason Charland (jason.charland@maine.edu) at UMaine and Karen Drew (K.Drew@northeastern.edu) at Northeastern to request an introduction. Directors Drew and Charland will serve as the joint single point of contact both pre- and post-award, ensuring equitable project implementation and support.

Personnel (Research Staff, Postdoctoral Researchers, Graduate Students) *submit biosketch for each individual listed	**Funding Requested (inclusive of fringe, if applicable)**	**Budget Justification**	**Place of Expenditures (UMaine or Northeastern University)**
Travel	**Funding Requested**	**Budget Justification**	**Place of Expenditures**
Other Direct Research Costs (materials, supplies, non-capital equipment)	**Funding Requested**	**Budget Justification**	**Place of Expenditures**
		Total Funding Requested (Northeastern University)	
		Total Funding Requested (UMaine)	
		Total Funding Requested (Combined)	

Please provide your project budget in the following format, adding sufficient detail in the budget justification to describe the roles and responsibilities of supported individuals as well as the use or function of requested other costs. Add additional rows if necessary. Funds should be apportioned evenly between the two institutions, with each university's $25K contribution remaining on its campus. Only direct costs are allowable.

Project Title:

Submitting PIs: