FALL
2024

UNE MAGAZINE

UNIVERSITY OF NEW ENGLAND

RESEARCH

For the Health of Our World

University of New England students learn by doing. They engage in hands-on projects that place them at the very center of the educational experience. In so doing, they make direct connections between the classroom knowledge they must assimilate and the real-world applications of that knowledge. And they contribute to important new discoveries along the way.

At the undergraduate level, 46% of UNE students work directly with faculty on research projects — almost twice the national average. Our graduate student researchers pursue a multitude of projects within a community that includes future doctors, pharmacists, dentists, many other health-related professionals, as well as scientists and scholars in various disciplines beyond the health professions — offering countless opportunities to work across traditional disciplinary boundaries.

Over the past several years, the innovative projects conducted by our faculty and students have led to steadily increasing funding, public recognition, and opportunities for collaboration with other major players in the research ecosystem.

UNE's distinction as a research university has garnered many accolades:

- Since 2018, UNE has been listed by the Carnegie Classification of Institutions of Higher Education as an R2 Doctoral University with High Research Activity
- UNE is ranked first among all colleges and universities in Maine in annual research funding from the National Institutes of Health (NIH)
- UNE is the only university in Maine with two NIH-funded Centers of Biomedical Research Excellence

So, how is it, you may wonder, that a relatively small, regional university in Maine has become a leading research hub?

Collaboration, ambition, thoughtful strategic planning, and hard work.

UNE has cultivated partnerships with several prestigious research institutes in Maine, including MaineHealth Institute for Research, The Jackson Laboratory, MDI Biological Laboratory, Gulf of Maine Research Institute, and the Bigelow Laboratory for Ocean Sciences, among others. Our faculty investigators have established collaborations with top researchers across the nation and, indeed, the globe. These relationships have blossomed in recent years, with joint projects facilitating deeper connections and increased engagements while elevating UNE's reputation in fields like biomedical, public health, marine, and environmental research.

Teamwork comes to us Nor'easters naturally given our longstanding commitment to interprofessional education and practice in health care, which requires meaningful collaboration across units within UNE as well as partnerships with outside hospitals and clinics. This same collaborative spirit is also crucial for conducting world-class research.

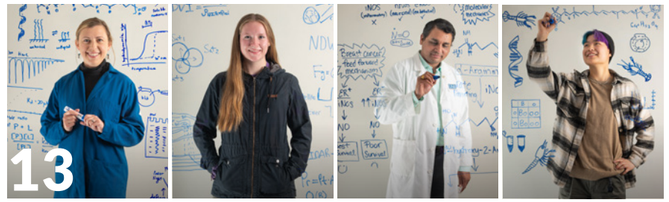
We are proud to be working alongside so many renowned research partners. Their eagerness to collaborate with UNE scientists and scholars demonstrates the high regard they hold for our faculty experts, our hard-working students, our world-class facilities, and the specific projects we are pursuing.

In short, "it takes a village" to make a significant impact in the lab, the field, and wherever else the research being conducted by our intrepid Nor'easters takes them.

We couldn't possibly encapsulate all of the amazing research we're doing in a volume of this size, but hopefully, this issue of the *UNE Magazine* will give you a sense of the important work we're pursuing. I hope you're as proud of this work as I am!

Warm regards,

JAMES D. HERBERT, Ph.D. | PRESIDENT



RESEARCH: FOR THE HEALTH OF OUR WORLD

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CONVERGENCE: TRANSFORMATIVE LOCAL PLANETARY HEALTH PARTNERSHIPS

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UNE CELEBRATES 10TH ANNIVERSARY OF TANGIER, MOROCCO CAMPUS

The University of New England celebrated the 10th anniversary of its Tangier, Morocco Campus in a special ceremony featuring remarks by President James D. Herbert on Tuesday, Oct. 22.

The event marked a decade of global education at UNE's one-of-a-kind facility in Tangier and highlighted the University's ongoing commitment to foster international understanding through education, community engagement, and cultural exchange.

Since its opening in the spring of 2014, UNE's Tangier Campus has welcomed 745 students, including 591 undergraduates participating in semester-long study abroad programs. The campus has also hosted 68 graduate students from UNE's Doctor of Physical Therapy and Master of Science in Occupational Therapy degree programs through short-term global study opportunities.

In his remarks, President Herbert said UNE chose Tangier as its primary study abroad location for its cosmopolitan nature, featuring cultural influences from around the world, while envisioning a campus that would meet the needs of students in all degree programs.

> "We are beyond grateful for the incredible 10 years our students have had in Tangier. And we look forward to many, many more years of intercultural exchange, productive collaboration, and friendship. *— James Herbert*

"This program offers a truly life-changing experience for our students," Herbert said. "When we opened the doors here for the first time, we opened the world — and worlds of new opportunities — to students from Maine … (and) they come back more mature, more confident, and more connected to the world than when they left."

UNE's Tangier Campus has long been a hub for cross-cultural learning, offering programs that deepen students' understanding of Moroccan culture and language while broadening their global perspectives.

"We are beyond grateful for the incredible 10 years our students have had in Tangier," Herbert said. "And we look forward to many, many more years of intercultural exchange, productive collaboration, and friendship."

UNE STUDENTS COLLABORATE WITH MAINE DEPARTMENT OF CORRECTIONS

The Maine Correctional Center in Windham, Maine, doesn't currently offer physical therapy in-house to its residents. But when Jacqueline Keller took a rare, behind-the-scenes tour of the facility with 30 other health care students from the University of New England in July, Keller asked if she could bring physical therapy to the residents.

The response from Chris Arbour, the center's deputy warden, was immediate: Let's make it happen.

"It seems like the kind of place where they're open-minded and looking for ideas and considering new research," said Keller (D.P.T., '27).

The organic give-and-take in the correctional center was what Trisha Mason, M.A., hoped for when she partnered with the Maine Department of Corrections several years ago to educate future health care professionals about underserved communities. Now, each fall, UNE students get a firsthand look inside the state's second-largest correctional facility on a tour led by Arbour and Mason, director of Service Learning at UNE.

"I think there's a renewed interest in working in corrections medicine. It's an industry that I think most students aren't exposed to and don't know about," said Mason.

Students also make harm-reduction kits that include personal hygiene products and letters of support to give to residents when they leave the center, which houses about 600 residents.

None of the students who toured the facility may ever work in a prison. But Arbour said building an understanding of the challenges faced by its residents is still valuable for future health professionals.

Vincente DeBack (D.P.T., '26) said the correctional center was nothing like what's shown in movies.

"It has definitely influenced how I want to practice as a health care provider. No matter who walks through my door, they deserve a listening ear," DeBack said.

DENTAL MEDICINE

UNE College of Dental Medicine Part of $4.4M Research Network

The University of New England College of Dental Medicine (CDM), Northern New England's only dental school, is among seven collaborators sharing a $4.4 million grant from the National Institute of Dental and Craniofacial Research (NIDCR) to launch a novel clinical practice-based research network to train future clinician-scientists.

Known as the Collaborative Clinical Practice-based REsearch Program for DENTal Schools (H-CREDENT), the five-year grant from NIDCR is led by the Harvard School of Dental Medicine (HSDM) and will establish UNE's Oral Health Center as a clinical research site for approximately 40 dental medicine students throughout the grant period.

The goal of the collaborative research project is to look for predictors of pain in patients as they recover from oral surgeries like root canals or tooth extractions.

Mohamed ElSalhy, B.D.M., Ph.D., M.Sc., M.P.H., assistant clinical professor of dentistry, is the principal investigator for UNE. Nicole Kimmes, D.D.S., dean of the College of Dental Medicine, is handling administrative, academic, and clinical logistics.

Additional collaborators include Cambridge Health Alliance, Charles River Community Health, and Harvard Catalyst, among others. The project leverages the consortium's collective expertise and encourages scientific partnerships between students and research faculty.

INSTITUTIONAL

Princeton Review Names UNE One of the Nation's Best Colleges 10 Years Running

This fall, the University of New England was — for the 10th consecutive year — named one of the nation's top institutions of higher learning, earning a spot in 2025 in The Princeton Review's annual book "*The Best 390 Colleges*."

The education services company known for its college rankings, books, and test preparation services selected higher education institutions based on information from school administrators plus input from students and school rating scores in eight categories, including financial aid, admissions selectivity, and sustainable ("green") initiatives, among others.

Only the top 15% of four-year colleges and universities in the United States were named to the 2025 list "*The Best 390 Colleges*."

Specifically, The Princeton Review commended UNE for creating a supportive and collaborative environment for students through small class sizes, internships, and opportunities to participate in impactful research with professors who are experts in their field.

The guide also highlighted the robust, cross-disciplinary experiential learning opportunities available to students of all academic programs and praised UNE's proximity to the ocean — "boasting scenic, coastal campuses on both sides of the Atlantic" — as a key attribute for students, particularly for those enrolled in marine- and environmental-focused majors.

PROFESSIONAL STUDIES

UNE Partners With Craft Beverage Experts for Industry-Specific Training

The University of New England announced in the spring that it joined forces with beer and distillery guilds to provide industry-specific training for staff across the country, setting a new standard for education and innovation in the industry.

Recognizing the dynamic shifts in the brewing and distilling sectors, the collaboration, "Crafting Futures," aims to address the evolving needs of the craft beverage industry and support the continued growth of these sectors. The program introduced a tailored curriculum, offering flexible learning models, including online courses, workshops, and immersive experiences.

Laura Lodge, owner and strategic advisor of Customized Craft Beer Program and a member of the "Crafting Futures" advisory board, said the program was launched at a critical time in the evolution of both distilling and brewing, when change is happening rapidly.

UNE Online Dean Beth Taylor-Nolan, Ed.D., added that "UNE is well positioned to deliver quality education in collaboration with our industry partners. ("Crafting Futures" will bring) practical, affordable, and accessible training to brewery and distillery owners, managers, and staff on topics that will help them address current challenges and prepare for future needs."

SUSTAINABILITY

UNE Celebrates Installation of New Biddeford Solar Array

The University of New England unveiled a 321.6-kilowatt solar array atop its Harold Alfond Forum sports complex in April, representing its largest investment in renewable energy to date.

The 804-panel array is projected to generate 353,531 kilowatt-hours annually — enough to power 32 area homes. This initiative marks a substantial reduction in carbon emissions, with the project slated to offset the equivalent of over 173 metric tons of carbon dioxide each year.

"This massive array turns (our renewable energy) vision into reality, and the energy it generates represents a significant stride in our march toward sustainability," UNE President James Herbert said at a ceremony commemorating the array.

The solar development — designed and installed by Revision Energy and Favreau Electric — is anticipated to produce the equivalent of nearly 3% of the Biddeford Campus' annual electricity consumption.

UNE currently owns and operates three additional photovoltaic arrays on its Maine campuses, projects that build upon the University's national reputation as a leader in sustainability. UNE has been named one of the nation's most environmentally responsible colleges for seven consecutive years by The Princeton Review, and this year, it was labeled one of the country's top 50 eco-friendly colleges.

WELCOMING, INCLUSIVE COMMUNITY

University of New England Hosts Civil Rights Icon Bettie Mae Fikes

At the University of New England's annual Martin Luther King Jr. Celebration in January, UNE welcomed renowned civil rights activist Bettie Mae Fikes, a founding member of the Freedom Singers, who traveled alongside King during the Civil Rights Movement.

Fikes, who is known as "the Voice of Selma," was present in Selma during Bloody Sunday and witnessed the beating of those who joined the march, including future Congressman John Lewis.

On Jan. 24, Fikes shared her personal experiences and the significance of music in the civil rights struggle with a robust crowd gathered in Arthur P. Girard Innovation Hall on UNE's Portland Campus for the Health Sciences.

"Look at the legacy (King) left. But I am standing here to tell you today, you have a legacy to leave," Fikes said.

Her performance featured a selection of songs, and she passionately emphasized the ongoing need for individuals to continue fighting for justice and equality.

The annual MLK Jr. Celebration is held in honor of King's historic 1964 visit to St. Francis College, the precursor to UNE's Biddeford Campus, and to encourage discussion of racial equality in the 21st century. Participants are taught about mental conditioning, non-verbal communication, personal space, reactionary distance, empathic listening, what to do when a situation worsens, and tactics to consider while maintaining personal safety.

MAINE'S MEDICAL WORKFORCE

UNE Receives Nearly $5 Million to Enhance Maine's Geriatrics Workforce

The University of New England received nearly $5 million in funding from the Health Resources and Services Administration (HRSA) in June to educate and train Maine's health care workforce to best meet the dynamic health needs of older adults.

Currently, there are fewer than 7,300 physicians who are board-certified geriatricians, representing fewer than 1% of all physicians in the United States. According to the American Geriatrics Society, the U.S. needs to train approximately 20,000 geriatricians to meet current needs and as many as 30,000 by 2030 to accommodate this growing aging population.

The five-year grant, totaling $4,999,585, will boost Maine's Geriatrics Workforce Enhancement Program, known as AgingME, which is administered through UNE.

"We are thrilled and honored to receive this vital funding from HRSA to tackle workforce needs and better support Maine's rural, older adults," said Susan Wehry, M.D., director of AgingME at UNE.

AgingME works in partnership with Maine's Area Health Education Center (AHEC), the University of Maine's Center on Aging, UNE's Center for Excellence in Public Health, and UNE's College of Osteopathic Medicine, Maine's only medical school.

HEALTH PROFESSIONS

UNE, Opportunity Alliance Partner to Provide Dental Care Access

In a room at The Opportunity Alliance in Portland, Maine, which operates a federal supplemental nutrition program for Women, Infants, and Children (WIC), locals who face cost and access barriers to dental care have benefited from a groundbreaking partnership between the alliance and the University of New England's Department of Dental Hygiene, which joined forces to offer a no-cost dental clinic for WIC participants.

The service currently operates for about 40 weeks during the academic year, providing dental cleanings, fluoride treatments, anticavity treatments, and oral health education to participants at the WIC office. The goal is to break down the barriers to health care services while training more dental hygienists.

Through the weekly clinic, UNE faculty say, lives are being changed.

"The need for this type of clinic is infinite," said Garrett Richardson, IPDH, M.S.D.H., EFDA, assistant clinical professor of dental hygiene at UNE.

Richardson said barriers to care include transportation, a dearth of available translation services, and lapses in acceptance of state-funded insurance by dentists.

"It is an amazing experience to help these families and send them home from their visit with a referral to a dental home that takes their insurance," said Sarah Hall (Dental Hygiene, '25).

INTERPROFESSIONAL

UNE Students to Run SeaMade Seaweed Company

The cranberry-almond-kelp bars that were mixed, pulverized, and cut on Aug. 21 in the University of New England's Teaching Kitchen looked like pocket-sized treats. But make no mistake, the impact of the University's new seaweed snack will be monumental, said Jim Irwin, CPA, UNE senior vice president for Finance and Administration.

"Eventually, they'll say 'SeaMade Bars from UNE,'" Irwin said.

This summer, SeaMade Seaweed Company co-owners Tara Treichel and Mark Dvorozniak gifted UNE their nutrition bar company to transition it to a pedagogical tool that will serve as a visible example of interdisciplinary collaboration. The limited availability of processed seaweed created challenges in meeting wholesale demands, they said. Gifting the company, founded on sustainability, to UNE, they said, was the perfect way to keep it viable.

UNE students were already harvesting kelp from UNE's aquaculture research farm, and they can harvest honey from UNE's beehives to provide key ingredients for the bars. Students in the College of Business will help run the financial and marketing aspects of the business, and other students in the health professions will study the nutritional aspects of the product.


Photo by Peter Guyton

SERVICE-LEARNING

UNE Doubles Quantity of Meal Kits at Second Meals for Maine Event

At the second annual Meals for Maine event held on Sept. 18 on the University of New England's Portland Campus for the Health Sciences, more than 150 students, faculty, professional staff, and community volunteers came together in Arthur P. Girard Innovation Hall to help package over 100,000 meal kits to donate to those in need to help meet Maine's goal of ending hunger in the state by 2030.

Last year, the University community assembled over 52,000 meals on the Portland Campus to help Mainers facing hunger. This year, embracing its "ONE UNE" mantra, the community worked on both the Portland and Biddeford campuses to double the effort — packaging 103,000 meals.

The meal kits were packaged with funding from the 9/11 National Day of Service organization, The Pack Shack's "Feed the Funnel" Grant Program, AmeriCorps, and MyGoodDeed, making UNE one of just 10 colleges or universities to receive a 9/11 remembrance grant.

"Growing up in a low-income area, my family applied for free heat. Now, this is an opportunity to give back. This atmosphere is amazing. I'm definitely going to do this next year," said Sofia Circosta (D.P.T.' 27).

ARTS AND HUMANITIES

UNE Instructor Explores Cancer Systems Through Art and Science

University of New England adjunct instructor and mixed-material artist Erin McGee Ferrell completed a residency at Columbia University last winter to dive into the world of cancer systems through a combination of art and science.

Ferrell specializes in embedding audio and video near field communications, or NFCs, into two-dimensional multimedia art. She experiments with thermochromic pigments and fluorescent powders in paintings to create multisensory visual experiences.

Working with the Navigating Cancer with Science and Art (NCSA) organization, she brought together scientists working in cancer systems biology, who have expressed cancer experiences and themes through their works, to explore the intersection between art and science in providing different perspectives on cancer.

McGee Ferrell worked with Diana Murray, a scientist at Columbia University's Center for Cancer Systems Therapeutics (CaST), where the two exchanged roles to gain a sense of each other's experiences. Murray spent time in McGee Ferrell's studio, and McGee Ferrell was embedded in the Columbia CaST environment.

McGee Ferrell called the residency "a transformative journey, bridging the realms of art and science to foster meaningful dialogue and actionable collaborative tasks."

CAREER DEVELOPMENT

School of Pharmacy Holds Second Annual Mock Interview Day

Last spring, the University of New England School of Pharmacy held its second annual Mock Interview Day with help from the Career Advising Office and 11 community partners.

Mock Interview Day is particularly beneficial for pharmacy students because they are given direct feedback from future employers, residency directors, and pharmacists, said Kerry Martin, Pharm.D., director of Experiential Pharmacy Education and assistant clinical professor in the School of Pharmacy.

The first half of the day took place inside Alumni Hall on UNE's Portland Campus for Health Sciences, where piping and drape created private interview spaces for students to meet with interviewers from community partners such as CVS Health, Hannaford, Holland's Variety Drug, Maine Medical Center Specialty Pharmacy, and Northern Light Eastern Maine Medical Center.

Students participated in two 30-minute interviews and received 10 minutes of feedback after each, and the day wrapped up with a more informal meet-and-greet event that provided a space for students to practice the art of mingling.

"Our students were able to practice essential soft skills like delivering effective elevator pitches, engaging in small talk, and networking with potential employers beyond those they interviewed with," Martin said. ■

COLLEGE OF BUSINESS

Business Students Turn Summer Internships Into Their Own Field of Dreams

From the box office to the bleachers, two University of New England business school students spent their summer maximizing the fan experience at Delta Dental Park at Hadlock Field as interns for the Portland Sea Dogs.

Sport Leadership and Management degree students Samantha Fickett ('24) and Morgan White ('25) applied the skills they learned in UNE's College of Business to manage mascots, promotions, sales, and social media for the minor league affiliate of the Boston Red Sox.

"This internship has been a great experience in putting what I've learned into action, making the fans a priority and giving them the best possible experience that they can have," said White, who oversaw the game-day activities of the team's mascot, Slugger.

Fickett worked as a ticket office associate, ensuring fans had a smooth entry into the stadium. For her, the job was all about building relationships with ticket holders and drawing fans to games through promotional events.

"What we learn in the classroom definitely correlates to the hands-on experience that we got," Fickett said. "It's nice to be able to take what we learn in class, bring it here, and actually see it in action."

COMMENCEMENT 2024

The University of New England awarded more than 1,500 bachelor's, master's, and doctoral degrees at its 189th Commencement ceremony on Saturday, May 18, at the Cross Insurance Arena in Portland. The University welcomed U.S. Sen. Bernie Sanders of Vermont to deliver the University's Commencement address, in which he praised UNE for addressing critical health care workforce shortages as Maine's No. 1 provider of health care professionals.

"A key part of what we have to do as a nation is train the next generation of doctors, nurses, dentists, pharmacists, and others to provide the highest quality of care that the people in Maine, Vermont, New England, and the country desperately need, and that is exactly what you are doing," Sanders told graduates and their families.

During the Commencement ceremony, UNE President James Herbert said Sanders' leadership in advocating for health care reform directly reflects UNE's educational mission.

"Sen. Sanders' commitment to being an innovator aligns with UNE's history of thinking outside-the-box in terms of the programs we develop, the partnerships we pursue, and the education we provide our students," Herbert said.

In his speech, Sanders called upon graduates to apply their UNE education to address current economic and political hardships.

"You are entering the workforce at a very difficult time in American history," Sanders said. "But we are depending on you, with full confidence, that you are going to have the strength, the energy, the vision, and the morality that will turn this nation around and make it the beautiful nation that we know it can become."

Sanders and Arthur "Art" P. Girard, a longtime friend and benefactor of UNE, were both awarded the honorary Doctor of Laws during the ceremony.

See more
une.edu/magazine

SMALL STEPS BIG IMPACT

A NEW ERA FOR BIOTECHNOLOGY RESEARCH AT UNE

by Alan Bennett

In 1939, a group of Franciscan monks had a bold vision: to bring higher education to the underserved. It was an act of innovation and service, laying the foundation for an institution that would continue to push boundaries for decades to come.

Eighty-five years later, that spirit of innovation lives on at the University of New England as it emerges as a leader in Maine's growing biotechnology industry.

Today, far removed from its humble beginnings as a friary along Maine's rugged coast, UNE has grown to become one of the leading research institutions in the Northeast. The University brings in millions of dollars in federal funding annually to support novel scientific initiatives, and studies on topics from cancer detection and treatment to protein synthesis and drug discovery are happening at a remarkable pace.

THE STORY OF HOW UNE GREW TO BECOME SUCH A POWERHOUSE IS ONE OF AMBITION AND DRIVE, SHOWING THAT CUMULATIVE SMALL STEPS CAN LEAD TO A BIG IMPACT IN SOLVING THE WORLD'S PROBLEMS. Not unlike the tiny proteins in our bodies that guide how we live and thrive, this small coastal university is now making a big impact on a state once unknown in the field of biotechnology.

"I wanted to see the ocean," said Peter Swanson, B.S. '24, about his choice to attend UNE for his undergraduate degree in chemistry.

Swanson works in an immaculately clean lab on UNE's Portland Campus for the Health Sciences, a name recently chosen to reflect the next generation of health professions education and research. This space is poised to contribute to Maine's next big biomedical breakthroughs.

Swanson is part of a research team utilizing dynamic light scattering to analyze *E. coli* particles. However, the team's focus isn't on studying *E. coli* itself. Instead, they aim to use the bacteria — typically associated with gastrointestinal illness — to manufacture proteins for biotechnology purposes.

> "There's never been a better time to be a biochemist."
>
> — *Eva Rose Balog*

Now graduated, Swanson spent the latter years of his undergraduate career as a research assistant in the lab of Eva Rose Balog, Ph.D., a professor of chemistry at UNE, whose work represents a new generation of UNE researchers whose studies are moving beyond the life sciences and into biotechnology, the practical application of biomedical research through the integration of technology.

Balog is one of several researchers at five academic institutions nationwide who are sharing a $6 million grant from the National Science Foundation's EPSCoR program to advance quality control for cell and tissue biomanufacturing. Their work is paving the way for the development of a biosensor — an innovative tool designed to enhance efficiency in quality control for biomanufacturing purposes, potentially saving lives and conserving resources.

The BIO-SENS project is a collaboration led by the University of New Hampshire with partners at UNE, Auburn University, the University of Maine, and the University of Wyoming. Researchers at each university aim to develop the components of a sensor that will be integrated into a single device to support quality control in biomanufacturing and biotechnology.

The goal is to create "smart" bioreactors that can continuously adjust conditions to ensure optimal cell growth, leading to higher-quality products, Balog explained. This work reflects UNE's evolution from exploration of the basic sciences to industry-focused research with implications to improve human health.

> "One of the things that attracted me to come here was the really great research community."
>
> — *Derek Molliver*

It wasn't always this way. With a strong grounding in the basic sciences, medicine, and health, UNE began its foray into biotechnology research with the help of researchers like Balog, who are marking the start of a new era for the university in technology transfer.

"There's never been a better time to be a biochemist," Balog reflected. "The enormous scale-up and mobilization of resources that COVID-19 drew upon for the vaccine development showed us that we can do biochemistry at scale. It's really in the water now to be able to discuss the meaningfulness of molecular sciences and biochemistry."

UNE's evolution to becoming a leader in biomedical and biotechnological research can be traced to 2012, when UNE was awarded its first Center of Biomedical Research Excellence (COBRE) grant. The center was supported by the National Institute of General Medical Sciences of the National Institutes of Health, to establish the Center for Pain Research on UNE's Biddeford Campus — marking the beginning of a biomedical boom whose resonance would usher in an epoch of unprecedented growth in this field of research.

Headed by Ian Meng, Ph.D., a professor of biomedical sciences and director of the Center for Excellence in the Neurosciences, the center aims to bolster the scientific understanding of the neurobiology of chronic pain and facilitate the discovery and development of novel therapies, including new drugs and non-pharmaceutical treatment options.

Left to right: *Eva Rose Balog, Scott Wood, Karen Houseknecht, and Derek Molliver*

The first phase of the grant increased UNE's capacity for biomedical research by expanding research facilities, recruiting new neuroscience faculty, and establishing two research cores. Since its establishment, federal support for the center has grown north of $25 million.

"The Center for Pain Research had a big impact in elevating the University in terms of developing research infrastructure and providing research opportunities for subsequent faculty hires," said Derek Molliver, Ph.D., who joined the University as a center researcher in 2014. "One of the things that attracted me to come here was the really great research community."

A SHIFT FROM INDUSTRIES OF THE PAST

According to the Bioscience Association of Maine, there are currently more than 9,800 life sciences jobs in Maine, and demand for jobs in the sector has grown 31% in the last five years.

The figures show that bioscience jobs are far outpacing the growth in all of Maine's industries, which have increased just 3% in the same time period. The fields of pharmaceutical and medicine manufacturing and scientific research and development dominate Maine's bioscience landscape.

What's more, UNE represents a significant portion of this growing industry — the University has been awarded $18.6 million in NIH awards in the past five years and has consistently ranked as the No. 1 college or university in Maine for NIH funding, including $4 million in 2022 alone.

UNE responded to this unprecedented growth by expanding research capacity in the biomedical sciences and engaging students in novel, faculty-led projects that aim to better understand and treat human disease — directly aligning with its strategic priority to make UNE a powerhouse of research innovation in Maine.

In line with this vision, UNE inaugurated the Portland Laboratory for Biotechnology and Health Sciences last year. Housed on UNE's Portland Campus for the Health Sciences, the lab fosters collaborative, interdisciplinary research to address local and global needs while facilitating opportunities for strategic research partnerships in industry, contributing to workforce development in one of Maine's fastest-growing research sectors.

> "Undergraduate, graduate, and professional students are going to have hands-on experience in biotechnology, from the generation of an idea in a lab to the development of a product to starting up a new business."
>
> — *Gwendolyn Mahon*

And, in January, the University announced that it was the recipient of $10.8 million from the NIH to fund a second COBRE grant, which will form the basis of a new Center for Cell Signaling Research, directed by Molliver. Faculty affiliated with the center will study the cellular mechanisms behind human disease with the goal of developing novel treatments for some of the most pressing health issues of our time, including diabetes, osteoporosis, and cancer.

INVESTING IN MAINE'S BIOMEDICAL WORKFORCE

Today, as a result of these investments, UNE is a Carnegie-classified R2 institution for high research activity, and dozens of researchers peppered across the University are using their talents and engaging students in meaningful research experiences that have the potential to save lives and make an economic impact far beyond Maine's borders.

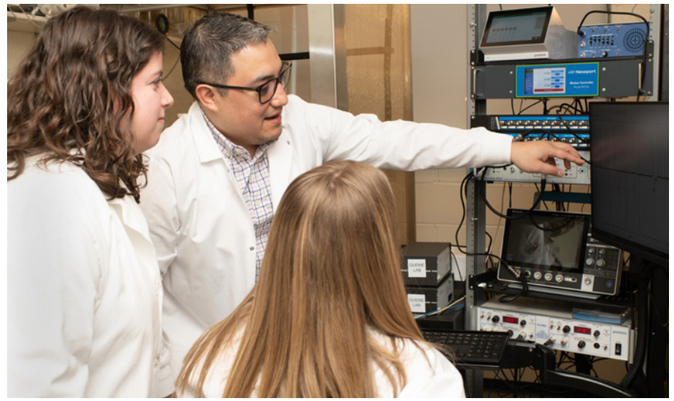
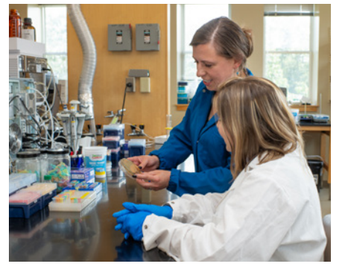
Such strategic ventures have increasingly become integral to UNE's mission, a shift that aligns with the foresight of new leadership. This leadership recognized the importance of addressing the ongoing workforce challenges faced by Maine and the nation, particularly in the health professions.

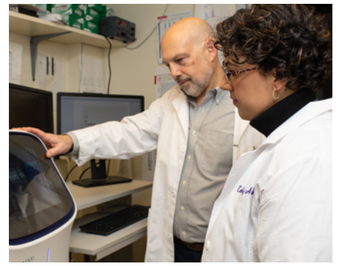
Gwendolyn Mahon, Ph.D., M.Sc., UNE provost and senior vice president for Academic Affairs, said the University's agility in developing programs to meet workforce demand invokes Maine's cornerstone entrepreneurial spirit.

"We have an opportunity to start afresh, to differentiate ourselves from our peers and provide a really forward-thinking education for our students," she said. "In order to grow the biotechnology industry in Maine, we must have a future-thinking and innovative workforce with skills not only in biomedical science but also in innovation, artificial intelligence, and business. We're making a bold move to serve Maine in helping create that workforce."

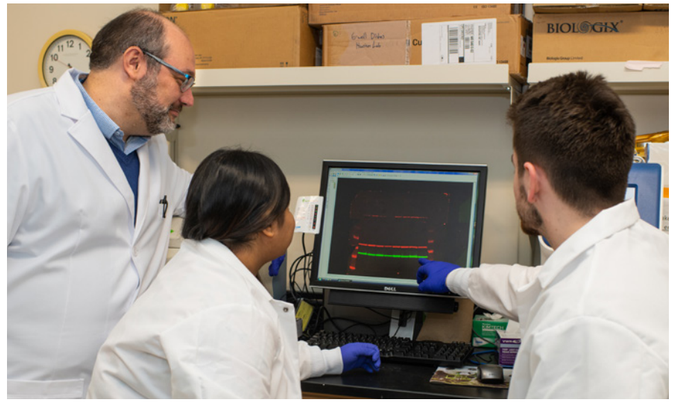
Mahon, an esteemed biomedical scholar in her own right, added that the transformation of UNE's Portland Campus for the Health Sciences — capped by the relocation of UNE's College of Osteopathic Medicine to the new Harold and Bibby Alfond Center for the Health Sciences — represents a new era of opportunity to engage students in the health disciplines in impactful research.

She cited the new Portland laboratory as an example of that, adding that the lab's new director, Scott Wood, Ph.D. — a biomedical engineer who has a long history of NSF-funded research — will also serve a valuable role as entrepreneur-in-residence, and she said UNE's new School of Computer Science and Data Analytics, under the leadership of leading computer scientist and entrepreneur Sylvain Jaume, Ph.D., will provide an advantageous convergence of disciplines.





"We're very excited about this new laboratory because, with the medical school moving to Portland, we will have all the health disciplines on one campus, where this state-of-the-art space is located," said Mahon, who noted that all four inaugural researchers hold biotechnology patents. "Undergraduate, graduate, and professional students are going to have hands-on experience in biotechnology, from the generation of an idea in a lab to the development of a product to starting up a new business."

Balog, the protein biochemist, said it's an opportune time for these developments. As employers cast a wider net for qualified applicants, they can draw from universities like UNE that are embracing emerging industries.

"I want to encourage my students to be entrepreneurial in biotechnology because they will be the next ones to run these kinds of labs," she said. "I think, with UNE's new College of Business and with Scott as entrepreneur-in-residence, everything is kind of coming together to make that more of a reality."

UNE is rare in that 46% of its undergraduate students complete faculty-advised research experiences — nearly twice the national average.

Swanson, who is now enrolled in a chemistry doctoral program at the University of Wisconsin–Madison, said the ability to work on an NSF grant as an undergraduate was an invaluable experience that set him up for early career success.

"To be able to work on a project of that caliber as someone who had yet to even obtain a bachelor's degree was so exciting," he said, adding that when he presented at conferences he was often mistaken for a graduate student. "It really gave me a leg up on my peers that I was fortunate to have."

Mahon emphasized that, while there is tremendous momentum in Portland, research on the University's Biddeford Campus will also only continue to grow. UNE plans major renovations to modernize and expand research laboratories and core facilities in Biddeford once the medical school relocates to Portland.

"We are very intentionally investing in our research infrastructure so as to provide the best possible environment within which our researchers and their students can thrive and our graduates can be best prepared to serve as Maine's future biotechnology workforce," she said.

A WEB OF STRATEGIC PARTNERSHIPS

As UNE's research capacity has steamed ahead, a dedicated group of strategic partners have helped lay the track.

For over 15 years, UNE has fostered a dynamic and productive research relationship with the MaineHealth Institute for Research (MHIR). It's a deep-rooted connection that highlights the alignment of research goals and efforts between the institutions, encompassing a range of activities from investigator-initiated projects to the shared oversight of COBRE programs.

"MaineHealth is one of our strongest and deepest strategic partners — not just for medicine but for all of our health professions," said Associate Provost for Research and Scholarship Karen Houseknecht, Ph.D., a pharmacologist with over a decade of experience in the pharmaceutical and biotechnology industries, whose research focuses on novel drug discovery and therapeutic development.

> "It's natural for us to collaborate with the University because they provide the range of investigator talents needed to fully investigate and solve complex health care challenges." — *Doug Sawyer*

And the relationship goes beyond research alone, extending into strategic leadership and collaborative initiatives across various domains, including a dedicated leadership committee that explores strategic alliances in areas such as graduate research, medical education, interprofessional education, and clinical placements.

The relationship is symbiotic, said Doug Sawyer, M.D., a cardiologist and chief academic officer at MaineHealth — the state's largest network of hospitals and health care providers — in that UNE brings a breadth of interprofessional expertise to MaineHealth's otherwise narrowly focused team of researchers.

"UNE's variety of health professions programs offer specialized skills that we don't have in-house," Sawyer said. "It's natural for us to collaborate with the University — on everything from ideation to investigation — because they provide the range of investigator talents needed to fully investigate and solve complex health care challenges."

This ability to form strong, harmonious partnerships is why, statewide, UNE is earning a reputation as one of Maine's leaders in the fields of biomedical research and biotechnology, Houseknecht said.

UNE's collaborative spirit was on display this past August, as U.S. Sen. Susan Collins of Maine announced $19.4 million in federal funding to continue expanding Maine's biomedical research capacity for five years through the Maine Idea Network of Biomedical Research Excellence (Maine INBRE), which is led by the MDI Biological Laboratory and includes 17 institutions across the state.

UNE joined the Maine INBRE network in the spring of 2020, and the University's contributions are part of a broader collaboration that includes institutions such as MHIR and The Jackson Laboratory.

Left to right: *Clifford Rosen, M.D., MaineHealth Institute for Research; Gwendolyn Mahon, UNE; and Karen Houseknecht, UNE*

The renewal allows UNE undergraduates to become INBRE research fellows and gives UNE faculty access to pilot funding. In 2023, UNE's Jennifer Garcia, Ph.D., assistant professor in the School of Biological Sciences, became the first UNE faculty member to receive INBRE research project funding to study yeast enzymes and cellular growth.

> "We have world-class researchers who compete on an international stage but whose hearts are fixed squarely here in Maine, where they are passionate about teaching the next generation." — *Gwendolyn Mahon*

Houseknecht said this and other recent awards underscore UNE's growing status as a key institutional partner in an industry that will only continue to expand.

"One of my key goals is to be a good partner," she said. "Real partnerships need to be a two-way street, focused on helping each other succeed, which is crucial for long-term growth and impact."

A BOLD COURSE FOR THE FUTURE

"You only need a small amount of a catalyst to have a sweeping change," Balog said. "Like proteins, a small number of people can make a big difference."

What started as a small number of dedicated research faculty has today ballooned into entire new departments, schools, and colleges across the University. And while the landscape may look very different from the friary of the past, the University's ethos is still the same: do what is necessary, do what is possible, and achieve the impossible.

"There is something really special about UNE," Mahon said. "We have world-class researchers here who compete on an international stage but whose hearts are fixed squarely here in Maine, where they are passionate about teaching the next generation of scientists, innovators, and entrepreneurs. There is a strong culture of collaboration, a sense of camaraderie, and a heavy dose of grit.

"We've got a good formula here," she added.

Molliver said the formula isn't a secret. It's actually quite simple: build it, and they will come.

"We've come so far in building a critical mass of researchers who can support each other, grow synergistically, and be successful in performing the research, getting out high-impact papers, and writing successful grant applications," he said.

Molliver said he is excited to enter UNE's next era — whatever it may bring.

"There's a lot of enthusiasm in the air at UNE now in terms of the opportunities and resources that we have available," Molliver said. "It's really a palpable atmosphere of excitement about research that I think has never been so strong." ■

HUMANS OF UNE

JENNIFER GARCIA, Ph.D.

interview by Zach Brockhouse

A biomedical investigator and assistant professor in the School of Biological Sciences, Garcia became UNE's first faculty member to receive funding from the Maine IDeA Network for Biomedical Research Excellence (INBRE) in 2023.

As an investigator, I often surprise people when I tell them my lab's research begins with something as simple as yeast.

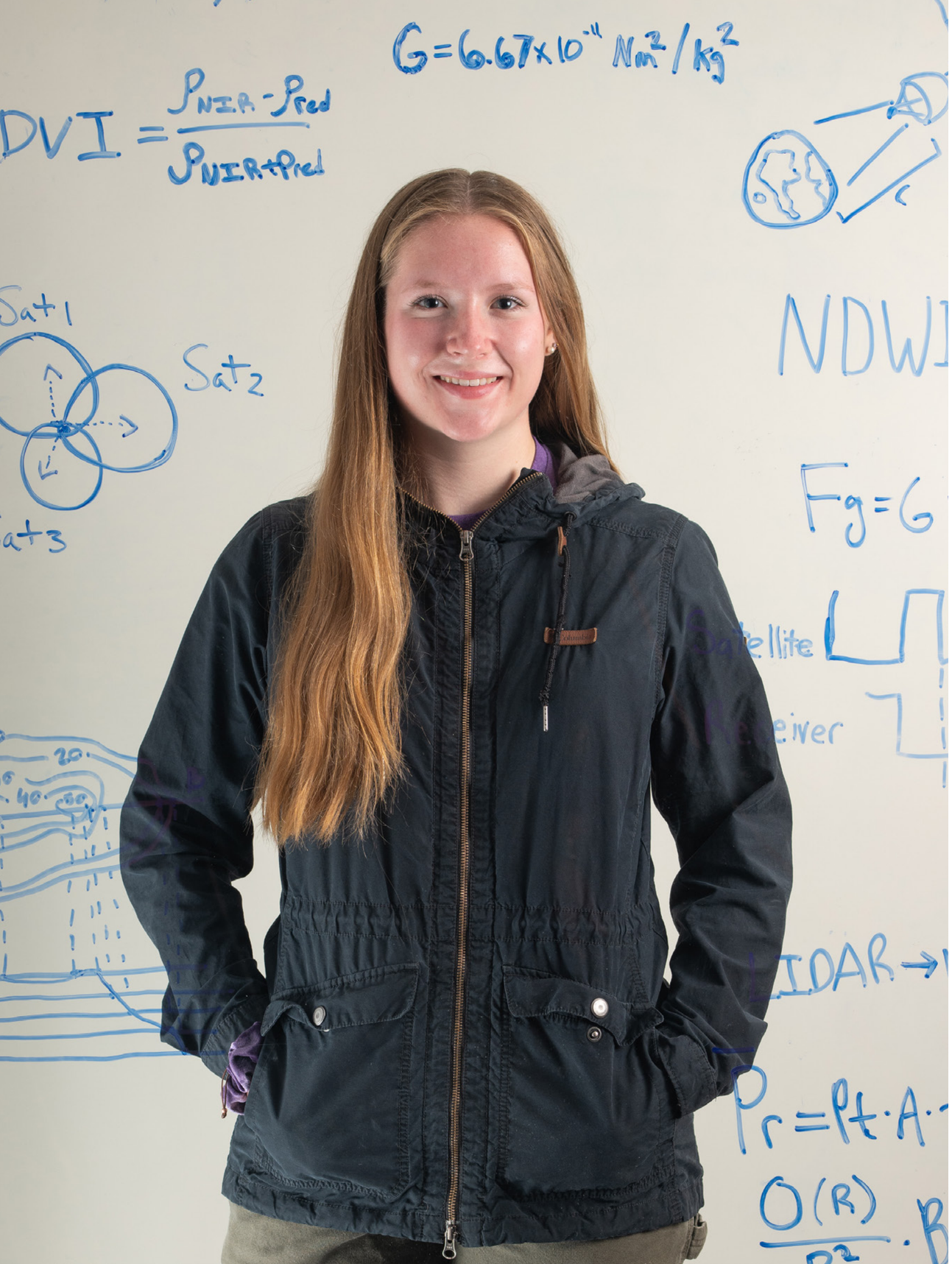
The Maine INBRE program, funded by the National Institutes of Health, has really made my research possible. With the funds from their grants, my lab can study how cells handle ribonucleic acid, or RNA, under stress.

I've always just been fascinated by RNA. It's simple and versatile. It serves as both a genetic information carrier and cellular machinery. We're looking at how cells identify, collect, and process unneeded RNA. This research could one day help us understand neurodegenerative diseases like ALS — amyotrophic lateral sclerosis — which results in the accumulation of unneeded RNA in cells.

My journey has taken me from different parts of California to Colorado and finally to Maine, where UNE has allowed me to expand my research and bring my family closer together.

I've always been motivated to help train people to become scientists. Giving students hands-on experiences in the lab is a great way to show the next generation of researchers how to be collaborative, yet independent, investigators, and I believe my greatest impact will be through my students' future achievements. As I often say, "I'm not going to be the one winning a Nobel Prize. It's going to be my future students, and that's going to be my impact on science."

Ultimately, I hope my contribution will be to train the next generation to cure cancer, to be the ones who will help people talk about genetic mutations and understand these diagnoses, and to help treat those with neurodegenerative health concerns. ■



MAPPING AND REVITALIZING MAINE'S COASTLINE

INTEGRATING GIS WITH MARSH RESTORATION IN SOUTHERN MAINE

by Joel Soloway

As a drone hums above UNE's coastal Biddeford Campus, the salty sea breeze mingles with the faint aroma of freshly cut grass. One might wonder how this high-flying marvel works to protect the serene salt marsh below.

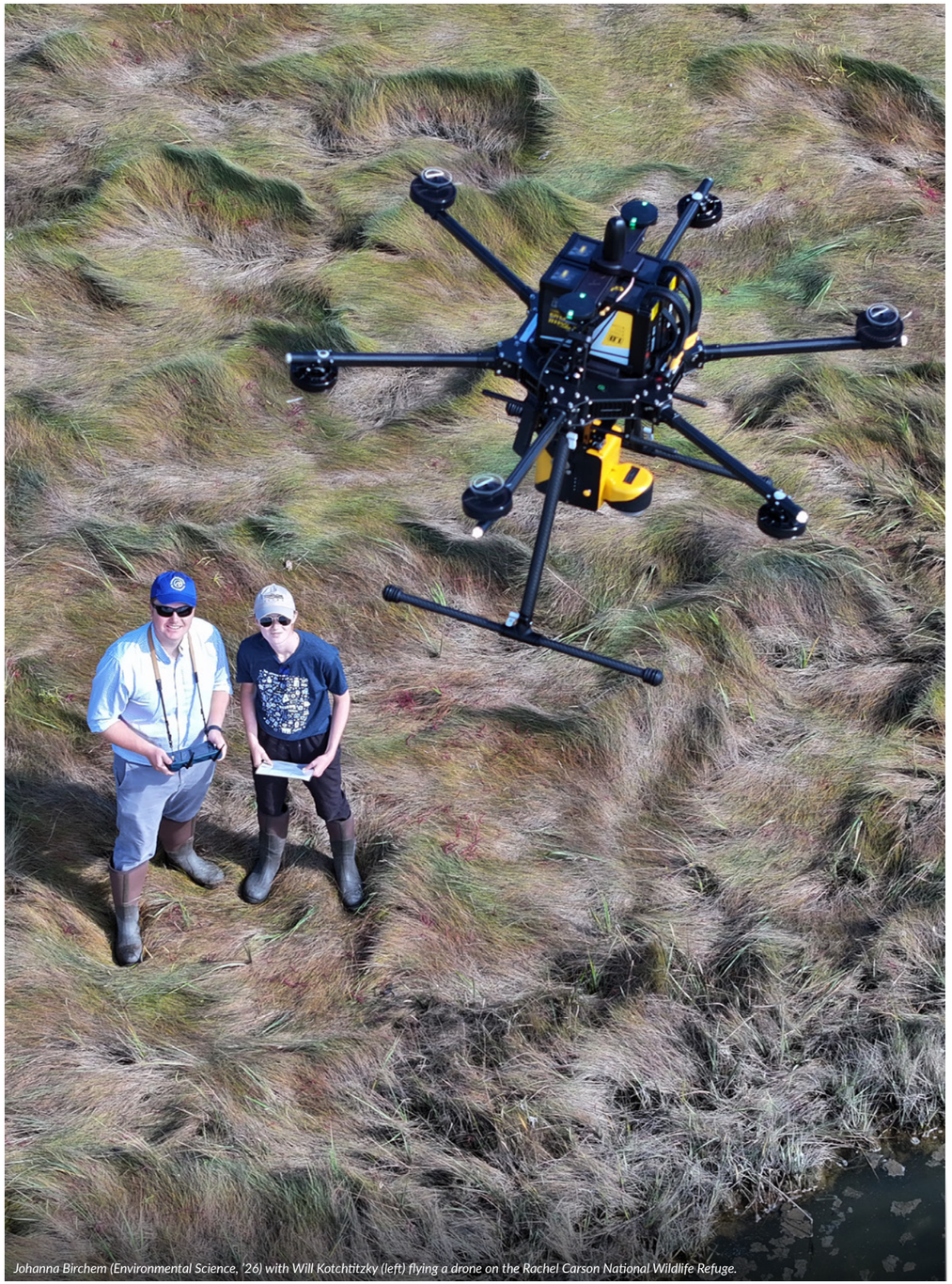
Katie DeWater, a senior studying Marine Sciences, has the answer.

DeWater works closely with UNE's Will Kochtitzky, Ph.D., an assistant professor in the School of Marine and Environmental Programs, whose research delves into the complexities of marsh restoration and dune preservation. In Kochtitzky's lab, DeWater uses drones, remote sensing, and GIS, a computer-based tool for storing, analyzing, interpreting, and visualizing geographic data, to map and plot a dozen coastal wetlands, called salt marshes, across southern Maine.

Partnering with researchers at the Rachel Carson National Wildlife Refuge (NWR), DeWater and Kochtitzky work to provide aerial perspectives of these salt marshes to better understand their current state and measure, in real time, as progress is made toward their restoration.

"WE HAVE BEEN GOING OUT TO FLY THE DRONE ABOUT ONCE A WEEK DURING THE LOW TIDES TO FLY OVER THE MARSHES AND COLLECT ELEVATION MODELS AND IMAGERY TO COMPLEMENT OUR TIME SERIES DATA SET," DeWater said.

The dataset, which goes back to 2009, helps DeWater assess how rising sea levels affect marsh pools. She explained that drone images taken along a transect line are stitched together with software to create a detailed image of the marsh.



Johanna Birchem (Environmental Science, '26) with Will Kotchtitzky (left) flying a drone on the Rachel Carson National Wildlife Refuge.

RESEARCH: FOR THE HEALTH OF OUR WORLD

> "We need to stay alert because the rate of change we're experiencing is unprecedented in geologic history."
>
> — *Will Kochtitzky*

As the sea level rises, salt marshes have difficulty adapting, said Kochtitzky. In Maine and the Northeast, "mega-pools" — which are large areas of too much water — kill the plants that grow there. Salt marshes and their ecosystems capture and store carbon, which helps combat climate change, and without healthy vegetation, the marshes can't do their jobs as effectively, he explained.

"We need to stay alert because the rate of change we're experiencing is unprecedented in geologic history," said Kochtitzky.

HUMBLE GIS MAPPING BEGINNINGS

As the leader of UNE's Geographic Information Systems (GIS) program, Kochtitzky was thrilled when DeWater took an interest in his class as a first-year student.

"Katie DeWater is incredibly impressive," he said. "She is extremely competent and dedicated to her studies and research."

At the start of Dewater's guided study, she explored ways to incorporate GIS mapping into an ongoing research project and planned to map the Biddeford Pool marsh adjacent to the Biddeford Campus, owned by individuals and organizations, including UNE.

Kochtitzky quickly realized that the scope of this project alone was insufficient for DeWater's thirst for knowledge, so the pair set to mapping all the extensive salt marshes along southern Maine's coast.

"(GIS) is such a powerful tool and skill because you can look at a global scale of changing systems, zoom in, and look over a temporal scale way back to the 1950s," she said, adding that comparing and analyzing data between regions spatially is vital to any mapping research.

Stemming from student enthusiasm and commitment to GIS research, like DeWater's, Kochtitzky's Coastal Research Lab came to fruition. The lab has secured nearly $1 million in total grant funding to UNE and partners from the Maine Natural Resource Conservation Program and the Maine Space Grant Consortium to use GIS mapping for marsh restoration efforts.

Susan C. Adamowicz, Ph.D., a land management research and demonstration biologist with the U.S. Fish and Wildlife Service, said engaging with the University to restore salt marshes has brought fresh perspectives and enthusiasm to the project.

"It is important to engage with the next generation, whether or not they become scientists, so that at least they will be more informed citizens," said Adamowicz, whose office manages Rachel Carson NWR.

The lab is now home to five undergraduate student researchers using drones and GIS technology to map marshes and beaches. While DeWater's research represents a newer aspect of salt marsh studies at UNE, it builds on UNE's long-standing legacy of marsh restoration efforts and collaborative endeavors.

Pam Morgan, Ph.D., UNE professor of environmental studies, has involved University students in salt marsh research projects since the early 2000s. Morgan and her students have investigated a wide range of topics, from the impact of oil spills to the functional differences between small fringing marshes and larger meadow marshes. Recently, her students have concentrated on coastal erosion in the salt marshes and riverbanks along the Biddeford Campus, aiming to develop a sustainable "living shoreline."

Morgan explains that monitoring the marshes from the air is an important step in the latest restoration efforts.

> "It is important to engage with the next generation, whether or not they become scientists, so that at least they will be more informed citizens."
>
> — *Susan C. Adamowicz*

"Will and Katie's GIS research and aerial mappings provide important information for scientists at Rachel Carson National Wildlife Refuge and go hand-in-hand with the ecology-based restoration work on the ground," she said.

Katie DeWater (right) and Will Kotchtitzky surveying megapools adjacent to the UNE Biddeford Campus.

Most of Kochtitzky's previous research has focused on the Canadian Arctic, where hardly anyone lives, but now he and his lab are actively engaging with local communities rather than staying solely in the academic world. He said it's rewarding to address the rise in sea level as a problem for those directly affected.

"It's really fulfilling to make a difference here in Maine," he said.

Kochtitzky, who has been at UNE since 2022, is a highly accomplished researcher having authored over 30 peer-reviewed publications with only eight years in academia. He is known for his significant contributions to his field and student research opportunities, said Stine Brown, Ph.D. UNE's interim dean of the College of Arts and Sciences and professor of biology.

"Dr. Kochtitzky is recognized as one of the University's rising scholars among the faculty, and it's exciting to see him mentor our next generation of conservation researchers," Brown said. "His actions as a faculty member embody the dedication to teaching and learning and to engaging students in collaborative research that maximizes the impact of this work on UNE students, other faculty researchers, community members, and organizations."

GROWING COMMUNITY CONNECTIONS

Over the past decade, Maine winters, particularly along the coast, have experienced more rain and wind than snow. This was especially apparent last winter when two major rainstorms led to historic coastal flooding and record-breaking high tides throughout much of the state. According to DeWater, salt marshes are particularly important during these large storms because they can provide a buffer area over which the tides and excess water can go instead of being directly forced onto developed areas and homes. Marshes also absorb the energy of incoming waves.

"With these recent storm surges and record-breaking tides, the marshes became completely inundated and underwater," she remarked. "The longer marshes have these complete submersions, the more erosion we see as they are exposed to wave action and currents."

Given the trends of past Maine winters, DeWater and other students in Kochtitzky's Coastal Research Lab anticipated a growing need for mapping the area. The group mapped and monitored the coastal marshes and beaches in the fall before the January storms.

Kochtitzky acknowledges that his team was lucky to have completed drone flights ahead of these storm surges.

> "I love being a student researcher at UNE because our lab frequently communicates and collaborates with the community." — *Katie DeWater*

"My students are creating lasting impacts in the Saco, Biddeford, and Kennebunkport communities," he said. "For the past six months, they have been comparing before and after imagery of these coastal systems."

Since the storms, local community members have contacted Kochtitzky seeking data and information related to their properties. DeWater attributes the University's prime location and strong reputation to its positive impact on the region.

"I love being a student researcher at UNE because our lab frequently communicates and collaborates with the community," she said, adding that a Goose Rocks Beach resident, whose house is mainly surrounded by marshland, asked the lab for before-and-after images of their property to better assess how they can start to rebuild. The lab provided drone data and surveys the previous year, showing a significant storm impact on their pier.

These images and data play a crucial role in helping local community members evaluate the extent of the damage and make informed decisions on rebuilding and fortifying their properties against future storms. "We have participated in numerous group meetings and engage with local residents to learn about their experiences and discover how our lab can support them," DeWater said.

In addition to their ongoing partnership with the Rachel Carson NWR, the Coastal Research Lab works with many local groups, such as Save Our Shores Saco Bay and the Biddeford Coastal Preservation Coalition.

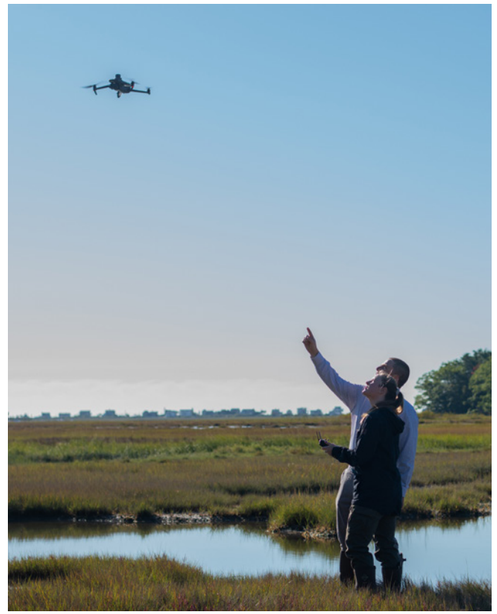
EXPANDING GIS MAPPING RESEARCH

DeWater's marsh restoration research has evolved with her advancing GIS mapping skills to include surveying the beachfront for sand dune loss, specifically identifying which types of dunes and coastal structures held together better during recent storm surges.

According to DeWater, the larger and healthier the dunes in front of residents' homes on the coast, the more resilient they are to sea level rise and withstanding these ever-intensifying storms.

"The dunes are sort of like the first line of defense, and then the marshes come behind them for backup," DeWater said.

Natural dunes can be a long-term defense against storms but erode without sand on the beach or wash away in powerful storms. DeWater plans to use her study to promote artificial dunes that mimic natural ones.



"To prepare for future storms, we're obviously trying to look at rebuilding damaged dunes from the wreckage they faced this past winter, but we are also trying to identify what coast type is the most resilient to storms so that we can focus our attention to those areas," she said, noting that community members can better protect their homes with diagonal dune paths from their houses to the beach.

DeWater's dedication to research has certainly not gone unnoticed. This past spring, she was one of just three recipients from Maine to be awarded the prestigious Barry Goldwater Scholarship for 2024.

In addition to engaging students in the research, Kochtitzky said he is looking at ways to expand DeWater's GIS modeling momentum, further incorporate the fieldwork across the curriculum, and involve new faculty members.

"I look forward to seeing how we continue to partner with our community and biologists at Rachel Carson to use restoration techniques and GIS mapping to make a difference," she said, adding that even after she graduates and goes on to graduate school, UNE students will be able to use her drone photography to examine coastal change over time, and she hopes students will take on the challenge of mapping the marsh pools in the future.

"Maybe it's boots on the ground planting new native vegetation, runnelling to create small drainage channels in the marsh, or working with Pam Morgan and her living shoreline research to improve hydrology," she said. "I am excited to see this work and research continue." ■

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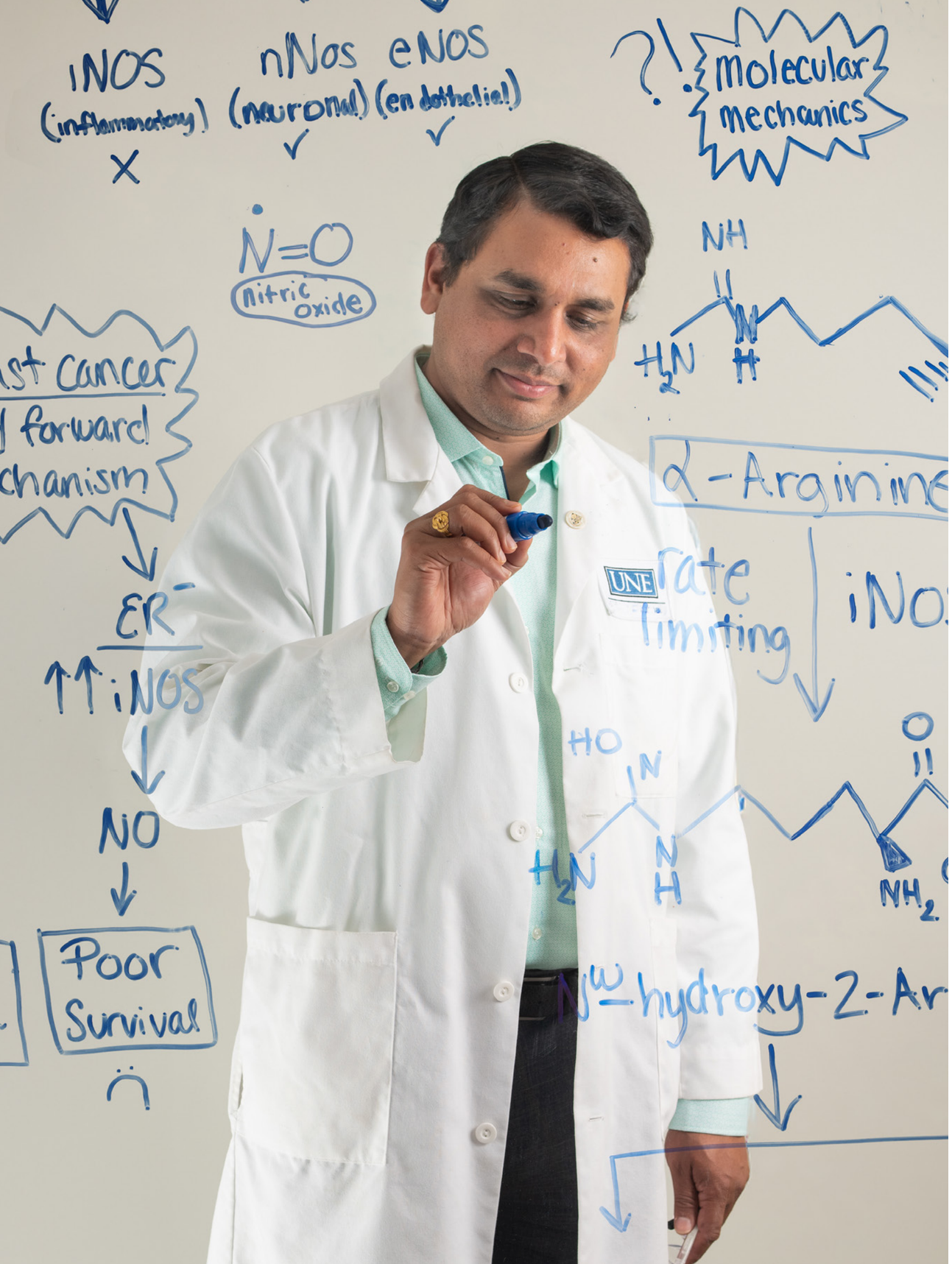


ADVANCING PREVENTIVE CANCER CARE

UNE, IN PARTNERSHIP WITH MAINEHEALTH, STANDS POISED TO TRANSFORM CANCER SCREENING AND TREATMENT, POTENTIALLY SPARING PATIENTS AND FAMILIES THE HEARTACHE OF LATE-STAGE DIAGNOSES.

by Emme Demmendaal

Imagine a world where a simple, routine blood test could detect cancer in its earliest, most treatable stages.

For people with some of the most aggressive forms of cancer, it's a promising reality that Srinidi (Sri) Mohan, Ph.D., professor at the University of New England School of Pharmacy, has been working tirelessly to bring to fruition — **ONE THAT HAS LIFE-SAVING IMPLICATIONS FOR UNDERSERVED, RURAL COMMUNITIES ACROSS THE GLOBE.**

Cancer research indicates that more than 9 in 10 women with breast cancer survive for five or more years when diagnosed at the earliest stage, but this survival rate plummets to just 3 in 10 when the cancer is caught in more advanced stages.

Treatment methods for breast cancer, especially for aggressive forms like triple-negative breast cancer, are limited by the inability to quickly determine treatment effectiveness and the lack of targeted therapies, often relying on toxic and expensive chemotherapy regimens that may continue even when ineffective.

It's an issue that Mohan ascribes to previous studies looking at the downstream production of nitric oxide, a signaling molecule that controls cancer cell growth.

From his previous research, Mohan discovered that a biomarker called Nw-hydroxy-L-Arginine, or NOHA, was both a sensitive and reliable indicator for estrogen receptor-negative tumors, a more aggressive type of breast cancer.

Existing research showed a connection between nitric oxide, inflammatory biology, and cancer, particularly breast cancer, he said.

That was when it clicked.

"The true 'ah ha' moment was when all dots connected and converged to this biomarker," said Mohan, who is chair of the UNE Department of Pharmaceutical Sciences and Administration.

NOHA checked all the boxes. It was upstream of the nitric oxide process, could be measured with a blood test rather than a tissue sample, and correlated directly with nitric oxide levels without interference from other pathways, Mohan said.

He launched into investigating NOHA as a potential biomarker for breast cancer detection and monitoring, applying for a patent on a diagnostic tool for using this blood marker to detect aggressive, estrogen-negative tumors and track cancer growth.

THE POWER OF COLLABORATION

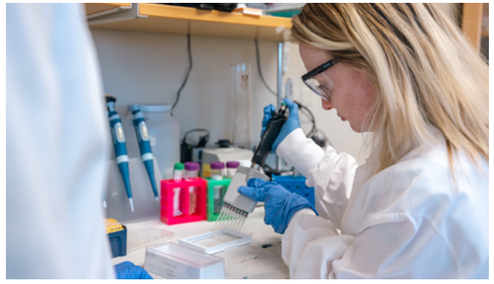
While Mohan was making headway in a UNE lab in Portland, across the city, Susan Miesfeldt, M.D., a medical oncology clinician at the MaineHealth Cancer Care Network, was returning from a volunteer trip to Tanzania, disheartened by a significant lack of breast cancer management resources there.

Miesfeldt discussed the inability to easily determine a patient's estrogen receptor status with another MaineHealth associate. Serendipitously, this colleague had recently attended a talk by Mohan, who discussed the potential application of a blood test for cancer screening and management.

"Sri had discovered this potential biomarker in his lab, and I identified this clinical problem halfway around the world," Miesfeldt said, explaining that her colleague had put the two in touch. "We put our heads together and tried to figure out how we could carry his initial discoveries into clinical care."

> "We put our heads together and tried to figure out how we could carry his initial discoveries into clinical care."
>
> — *Susan Miesfeldt*

Soon after, the two conducted a study at the Kilimanjaro Christian Medical Center in Moshi, Tanzania, to see if NOHA can determine the estrogen receptor status in breast cancer patients. Miesfeldt said that the findings of this initial study were promising, and the NOHA blood marker had the potential to address cancer care.



"If we continue to prove that NOHA can replace costly standard estrogen receptor testing, now largely inaccessible in low resource settings … we're opening the door to improve management of breast cancer patients in countries like Tanzania," Miesfeldt said, noting that it would have the largest impact for health disparities in underserved populations globally.

Moving forward in the U.S., the team is examining the utility of NOHA in managing triple-negative breast cancer at multiple points during a patient's treatment to identify if NOHA levels normalize as individuals respond to therapy through clinical trials at MaineHealth.

These studies are a crucial step in translating laboratory discoveries into clinical applications, Mohan explained, adding that they are also exploring the blood marker's potential in the early detection of breast cancer for people with genetic predispositions and its role in drug development.

It lays the groundwork for more dynamic monitoring of cancer treatment effectiveness, Mohan said.

Normally, doctors can't determine if a cancer regimen is effective until after the patient completes all planned cycles of chemotherapy, which can take up to six months. If the treatment is ineffective, the patient may have to start a new regimen, repeating the process.

With a blood test that tracks the NOHA biomarker, the physician could check NOHA levels after each cycle, and if the treatments show an unfavorable fluctuation, the physician can pause the specific drug combination and try a different one, Mohan said.

"We will be able to treat within those (initial) cycles, and it could have a much better outcome than going cycle after cycle or regimen after regimen," he said.

THE VISION OF ADVANCEMENT

Building on his initial breast cancer research, Mohan has expanded his work to include ovarian cancer.

According to the American Cancer Society, nearly 20,000 new cases of ovarian cancer are estimated to be diagnosed in the U.S. this year, with almost 13,000 women dying from the disease. Symptoms for ovarian cancer are generally less evident, if not absent, in the early stages and are often more noticeable as the cancer progresses.

His research showed that the NOHA biomarker could also be used to detect and monitor this type of cancer. This discovery led to a second patent covering the use of a blood diagnostic tool for identifying ovarian cancer.

"It validates to us that (NOHA) is not only going to be centric to breast cancer, but it can also expand to other tumors like ovarian cancer," he said.

Throughout the expanding research initiative, Mahon has engaged over 30 UNE Doctor of Pharmacy students in focused research and scholarship related to the NOHA biomarker.

Experiences like these are significant, he said, because it helps future health care professionals tangibly understand the role of research in advancing medical knowledge and treatment options for patients. Most recently, Emmeline Graham, Pharm.D., a Class of 2024 graduate who is now a resident pharmacist at MaineHealth Maine Medical Center, worked with Mohan in his research.

"Working closely with Dr. Mohan in his lab has been an incredible experience," Graham said. "As a future pharmacist, I wasn't just learning about drug interactions and dosages in my program but given a chance to have a hand in the research that goes into developing new diagnostic tools."

But engaging UNE students in the lab was only one side of the experiential educational equation. Miesfeldt currently has a UNE medical student participating in the clinical side of the research.

The student helped with clinical data validation, specifically looking at the chart and validating the clinical database that has been built as a result of the triple-negative breast cancer study.

Miesfeldt said, "We need to promote future researchers and future clinicians with a drive to make a lasting impact on patient outcomes."

A sentiment echoed by Mohan.

"By involving (students) in research, we're giving them a valuable perspective on how scientific inquiry can inform and improve patient care. This experience can make them better practitioners, more critical thinkers, and potentially collaborators in future clinical research," he said.

> "This cancer detection tool has the potential to benefit individuals regardless of their economic status."
>
> — *Sri Mohan*

The next steps of the collaboration between Mohan and Miesfeldt will involve scaling up the research for analytical and clinical validation of their findings, which is crucial for moving toward FDA approval and eventual commercialization of the NOHA biomarker test, Mohan said.

"This is where it is critical that we make the next transition to a commercializable product, to reach the people who would actually use it," Mohan said. "This cancer detection tool has the potential to benefit individuals regardless of their economic status, in high-resource settings like the United States and in low-resource settings globally." ■

SUMMER UNDERGRADUATE RESEARCH EXPERIENCE

At the intersection of passion and academics — a place where theory meets practice and students become authors of new knowledge — the University of New England's Summer Undergraduate Research Experience program becomes the crux of fostering the next generation of researchers, thinkers, and change makers.

With an eye toward increasing meaningful student involvement in research, scholarship, and creative inquiry, this competitive stipend program, commonly referred to as SURE, funds summer research projects across a wide range of disciplines, including humanities, health, social sciences, natural sciences, mathematics, business, education, and marine sciences.

SURE encourages students in the College of Arts and Sciences and Westbrook College of Health Professions to expand their coursework knowledge into advanced realms of understanding, preparing them for further study in their fields.

Students benefit from close collaboration between faculty mentors, a key aspect of UNE's approach to undergraduate research. Each year, the program culminates in an annual fall symposium showcasing the research and highlighting the diverse array of scholarly inquiry by students in various disciplines.

The program is part of UNE's broader commitment to undergraduate research, which sees 46% of undergraduates engage in research activities outside of the classroom. This high level of participation reflects the university's emphasis on creating new knowledge, promoting interdisciplinary collaborations, and providing students with opportunities to present their work at conferences and even publish scholarly articles.

By offering these research experiences, UNE provides opportunities for students to confront pressing societal challenges through foundational, translational, and interdisciplinary approaches, making research and scholarship essential components of students' educational experiences.

This hands-on creation and application of knowledge not only prepares UNE students for successful careers and graduate study, but it also cultivates the critical thinking and problem-solving skills essential in our rapidly evolving global economy.

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CRACKING THE GENETIC CODE

A TEAM OF RESEARCHERS AT UNE IS INVESTIGATING WHY SOME LOBSTERS ARE BLUE, ORANGE, AND EVEN PURPLE — FOR THE FIRST TIME.

by Alan Bennett

Ruby Motulsky wanted to find community through research.

That's why Motulsky ('25) traveled 3,000 miles from Los Angeles to Maine to study marine sciences at the University of New England despite having access to excellent marine research institutions much closer to home.

"I REALLY WANTED A UNIVERSITY THAT PRIORITIZES A HANDS-ON UNDERGRADUATE EXPERIENCE. I KNEW I WANTED TO BE IN A RESEARCH LAB DURING FRESHMAN YEAR, AND UNE PROVIDED THAT OPPORTUNITY FOR ME," Motulsky said. "UNE checked those boxes."

Now a senior, Motulsky, who uses they/them pronouns, has had their fair share of hands-on experience, most recently researching the American lobster with UNE's Markus Frederich, Ph.D., a professor of marine sciences, whose novel studies in invertebrate physiology could have broader applications across the marine research field.

Frederich is an internationally recognized marine physiologist, whose dedication to student success and innovative research on invasive crustaceans and the impacts of climate change has strengthened UNE's reputation as a national leader in marine and climate studies — in fact, UNE was named one of the "Top 10 Best Colleges for Marine Biology" by *College Magazine* in 2023.

In his 20-plus years at UNE, Frederich has led the University to new heights in securing significant research funding from renowned federal agencies, including the National Science Foundation, or NSF.

Such initiatives include a $640,000 teaching grant from the NSF to integrate hands-on research into STEM curricula, awarded in 2017. In 2019, Frederich was designated to lead UNE's efforts as part of a $20 million NSF-funded initiative to study Maine's coastal ecosystem in collaboration with the Maine Department of Marine Resources, Bigelow Laboratory for Ocean Sciences, and the University of Maine.

Frederich has also made a lasting impact through mentorship, guiding dozens of students who have gone on to pursue master's, doctoral, and medical degrees as well as careers in government agencies.

For Motulsky, studying under Frederich was the perfect fit.

A HUED MYSTERY SURFACES

Frederich had already been studying the iconic Maine lobster for years when a rare yellow lobster was donated to UNE in 2021.

That same year, a split-colored lobster was donated. Then came another rare-colored lobster, and then another. But what causes these typically brown bottom-dwellers to turn blue or yellow — or even orange?

Frederich wanted to find out.

"We frequently receive calls and emails offering us more of these beautiful colored lobsters," Frederich said. "Everybody who sees these critters certainly wants to know what makes them so different."

Frederich launched an initiative last winter to decode the molecular basis for rare lobster coloration through noninvasive methods, a first-of-its-kind approach. Frederich and his research team — including Motulsky — are using molecular techniques, such as gene expression, transcription, and sequencing, to understand why some lobsters exhibit these striking colors.

And they don't have to look far for research specimens.

A LIVING LABORATORY TAKES SHAPE

UNE is currently home to 12 multicolored lobsters, each with a rarity ranging from 1-in-1 million to 1-in-50 million.

Among the impressive array — which now includes blue, calico, and purple varieties — is Peaches, a 1-in-30-million orange rarity, who became a viral sensation when she came to UNE in 2023. Unbeknownst to researchers at the time, Peaches arrived bearing eggs, presenting Frederich's team with a never-before-seen opportunity to gather data on the color of her hatchlings.

"To my knowledge, no one has ever reared lobster larvae from a colored lobster in a controlled lab setting," Frederich said. "We're able to ask questions like: are all offspring of an orange lobster orange? — No, only some — Is there a different survival rate between orange and normal-colored larvae? No."

And, lastly, "What causes the different coloration? We are working on that part," he said.

Photo by Markus Frederich

It's a task that Frederich and Motulsky began this past summer, when Motulsky received $5,000 from the Bioscience Association of Maine to support their summer research on raising, counting, and collecting data on Peaches' offspring.

They counted over 4,000 larvae when Peaches' eggs initially hatched in July. A little over half of those that hatched shared her orange coloration. Peaches was soon joined by the egg-bearing Norma, a lobster of typical brown coloration, whose hatchlings provided another resource for the lab's studies.

"The Maine Department of Marine Resources graciously donated Norma and was amazingly helpful in adjusting the required permits to keep egg-bearing lobsters at UNE," Frederich remarked.

Today, Frederich's lab is studying and raising a total of 57 juvenile lobsters, about half of which are orange, and the rest are brown. And, while the team has yet to identify the root cause of rare shell coloration, Motulsky has some theories.

"I've learned that the orange coloration may be an outcome of a recessive gene," Motulsky said, noting that further study needs to be done to confirm their hypothesis.

Motulsky said the summer research experience taught them about best practices for troubleshooting unforeseen circumstances and how to trust their instincts and work through imposter syndrome. They said working on the project gave them confidence in their abilities.

"I learned so much this past summer about being a full-time researcher, including how to be resourceful and creative at each step of the process," Motulsky explained. "I feel accomplished and proud of myself, and I feel a weight that motivates me to continue working on this project and eventually share a final cleaned-up piece of all my knowledge."

NEW APPROACHES TO FAMILIAR SCIENCE

What distinguishes UNE's research is its use of noninvasive methods to study the lobsters' DNA, avoiding harm to the animals. Rather than relying on traditional, often invasive, techniques to extract genetic material, Frederich and Motulsky are working with cutting-edge molecular methods, including real-time polymerase chain reaction, to observe patterns in gene expression.

These methods aren't just a win for lobster welfare. They could eventually be applied to a range of species, informing more ethical and sustainable research techniques across all of the marine sciences.

Frederich admits the research doesn't directly address a pressing global crisis, but, he said, it teaches students skills that are transferable to a number of other disciplines that just might.

> "Understanding the genetics behind color variation could help us understand how different species adapt to their environment, which is critical as oceans undergo significant changes."
>
> — *Markus Frederich*

"Not all science is done to address an immediate crisis," Frederich said. "Sometimes, it's about understanding the world around us. Lobsters are iconic in Maine, and we're interested in uncovering what causes these beautiful creatures to look the way they do."

Frederich's research doesn't stop at lobsters. His lab also studies green crabs, an invasive species that similarly exhibits unusual coloration. Interestingly, Frederich noted that while green crabs can change color over time, lobsters maintain their original coloration throughout their life cycle.

"Comparing these two mechanisms might help us sort out the underlying processes," he said.

While understanding why lobsters are different colors may seem like a niche question, the research has potential implications for environmental adaptation and the health of marine ecosystems.

"Understanding the genetics behind color variation could help us understand how different species adapt to their environment, which is critical as oceans undergo significant changes," Frederich said, noting that the Gulf of Maine is warming faster than the majority of the world's oceans. "And, by involving students in this research, they are learning a broad range of modern molecular biology techniques and skills that can be easily transferred to other projects and questions."

By studying both species, UNE is contributing valuable insights to the field of marine biology — insights that could have far-reaching implications, said Charles Tilburg, Ph.D., director of UNE's School of Marine and Environmental Programs and the Arthur P. Girard Marine Science Center.

> "Dr. Frederich and his team are performing novel, interesting research while partnering with a local industry, providing outstanding training for our students, and answering important questions that pertain to a rapidly changing ocean."
>
> — *Charles Tilburg*

"This is the type of project that plays to both UNE's strengths and our goals," he said. "Dr. Frederich and his team are performing novel, interesting research while partnering with a local industry, providing outstanding training for our students, and answering important questions that pertain to a rapidly changing ocean."

For Motulsky, cracking the code on rare lobster coloration is proof enough that curiosity, creativity, and collaboration are at the heart of the best scientific breakthroughs.

"I have accomplished significantly more than I would have ever thought I could during my three years here," Motulsky said. "The collaborative efforts and community that have been built at UNE's Marine Science Center are something special that I would not trade for anything." ■

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Fifteen Minutes With KAREN HOUSEKNECHT

Interview by Josh Pahigian

> We are at the beginning of a new wave of strategic growth at UNE, and we are making smart, intentional, strategic investments.
> — *Karen Houseknecht*

As UNE's associate provost for Research and Scholarship, Karen Houseknecht, Ph.D., plays a crucial role in leading research efforts across the University's campuses. She recently sat down with UNE Magazine to reflect on UNE's recent research success, its internal and external partnerships, and its plans for continued research growth.

How has strategic planning contributed to UNE's research growth?

When I came into this role in 2018, it was at the time when President Herbert was initiating efforts to create the University's new strategic plan. Historically, research had not been considered part of the core mission of UNE as we had — and always will have — the teaching/education mission as part of our DNA. Coming into the role, my primary goal was to ensure that research and scholarship would be included as part of the new strategic plan. And it was not at all guaranteed that they would be. As research became Priority Three of UNE's strategic plan, it really empowered me to say, "Okay, what are the strategic investments we need to make to continue this momentum?" And now, I can point to that strategic plan and say, this is what the University wants to become, and our strategies are aligned.

> It speaks to the excellence of the science and scientific leadership of UNE faculty as well as the strong institutional commitment to research. — *Karen Houseknecht*

Why is UNE's research evolution to biotechnology and biomanufacturing important?

The biotechnology and biomanufacturing piece is critical for several reasons. First, biotechnology and biomanufacturing are what we call applied sciences, and UNE identifies as an "applied university." We create new knowledge, but our primary focus is about solving problems, helping patients, impacting climate, impacting communities, and making real-world differences in countless other ways. Biotechnology and biomanufacturing are about taking basic science knowledge and creating a product — whether it's a drug like insulin or a diagnostic test that's helping to diagnose cancer or a biosensor to enable quality-control in a manufacturing process. We're applying all the knowledge we have about biology and human disease and human medicine to make something that helps people.

Can you share a story of a successful research collaboration at UNE?

UNE and MaineHealth have been collaborating on research for at least 15 years. From investigator-initiated National Institutes of Health-funded research collaborations to sharing expertise, resources, and leadership oversight of the Center of Biomedical Research Excellence (COBRE) programs at UNE and MaineHealth, to inclusion of UNE faculty in the NIH-funded Northern New England Clinical Translational Research Center led by MaineHealth and the University of Vermont, there is a strong research connection between our institutions. From a research point of view, we're very closely aligned.

This relationship extends beyond our research enterprise, including a leadership committee that meets to work on strategic alliances representing research, medical education, interprofessional education, clinical placements, and so on. Lately, we've been discussing, more and more, research collaborations on the graduate education side. And they love having UNE medical students working in their research laboratories.

Why is UNE's two NIH-funded research center status significant in Maine?

First, what a tremendous accomplishment for UNE to have two NIH COBRE grants! It speaks to the excellence of the science and scientific leadership of UNE faculty as well as the strong institutional commitment to research. All of our researchers are also teachers — this fact alone speaks to the strength of their commitment to research. Also, COBRE grants require extensive institutional commitment in terms of resources, such as matching funds and research space. This level of research excellence and institutional commitment, recognized by the NIH, translates into UNE's research enterprise being taken more seriously by outside entities. Not only are we gaining extramural funding, but we're also building a reputation that we're a good partner. And one of my biggest goals is to be a good strategic partner. That may sound obvious, but lots of times potential partners come to the table and it's like, "what can you do for me?" To have a real partnership, it has to be a two-way street. And I think one of the many reasons MaineHealth has been such a great partner is that we're not direct competitors. And we're always asking, "How can we help each other?" How do we both win?" It sounds obvious. But it doesn't always work that way.

What could the future hold for research at UNE?

We are at the beginning of a new wave of strategic growth at UNE, and we are making smart, intentional, strategic investments. We've talked about biotechnology and biomedical research, but biotechnology extends to some of the work being done in other spaces at UNE, like the life sciences, marine, and aquaculture research spaces — a much broader umbrella of research focus than we are pursuing currently. Another important area for UNE is public health. We have a vibrant Center for Excellence in Public Health, and I believe we have an opportunity to grow our research portfolio there. As UNE grows marine and environmental programs, business programs, and computer science and data analytics programs, with a focus on innovation, the work we're doing is going to provide a springboard for other applied areas of research and scholarship — whether it's in the research space, workforce development, innovation, or intellectual property. This is a very exciting time to be at UNE! ■

TRANSFORMATIVE LOCAL PLANETARY HEALTH PARTNERSHIPS

by Deirdre Fleming Stires

UNE North and local Biddeford partners join forces to address the city's urban core climate resilience.

In his first year as director of UNE North, a University of New England center that facilitates partnerships across the North Atlantic to address social, environmental, and economic challenges in the region, Cameron Wake, Ph.D., looked to forge alliances close to home — very close to home.

The past year, Wake worked to make Biddeford's low-resource, urban core more climate resilient with the city of Biddeford, the local nonprofit economic development organization Heart of Biddeford (HOB), UNE's Center for Excellence in Public Health (CEPH), the Biddeford Housing Authority, and several other local and University partners.

"What we're doing is helping to nurture and create community, not traditionally a role that a university plays. And yet, if you asked me what UNE North is — that's it," Wake said.

Biddeford has a historic mill district along the Saco River that has metamorphosized over the past several years into a hip tourist destination lined with hotels, restaurants, and shops owned by eclectic artisans. In 2022, *Food & Wine* magazine named Biddeford — what some call "the new Portland" — one of just four small American cities with a big foodie scene.

> We're focusing on the challenges that society is facing and engaging our students, faculty, and professional staff in addressing those challenges instead of purely academic interests. — *Cameron Wake*

Downtown Biddeford is also home to a densely populated neighborhood rife with air pollution and cramped, sub-code apartment buildings that lack reliable, energy-efficient cooling and heating sources.

These older neighborhoods, said Delilah Poupore, HOB executive director, share a common spirit rooted in kindness, generosity, and a mutual respect passed down through generations of French-Canadian families.

"This is a close-knit community with neighborhoods that were left behind in the economic revitalization of the last decade," she said. "People in Biddeford are often referred to as scrappy. They make things work, even if the conditions aren't always the easiest."

It's here that the new team of advocates hopes to turn the disadvantaged neighborhood into a healthier community.

"We're focusing on the challenges that society is facing and engaging our students, faculty, and professional staff in addressing those challenges instead of purely academic interests. The only way this can happen is if everybody pulls in the same direction," Wake said.

The local community group seeks to fund creative, climate-friendly improvements, such as adding solar panels and heat pumps to low-income apartments, painting the roofs white, and redesigning streets with tree-lined boulevards for shade. They would add free electric bikes, an electric vehicle sharing program, free electric-bus

Left to right: *Delilah Poupore, Heart of Biddeford; Alethea Cariddi, UNE; Brad Favreau, City of Biddford; Will Kotchtitzky, UNE; Michele Polacsek, UNE; and Cameron Wake, UNE*

transport, installing many more electric vehicle charging stations (including on the waterfront to charge electric boats) and a renovated community center that would also serve as a resilience hub, providing critical resources during heat waves and other natural disasters.

All told, the climate justice initiative would improve air quality while reducing pollution and greenhouse gas emissions, reducing energy costs, and providing air-conditioned apartments and community centers in Biddeford's downtown corridor.

Then, once the infrastructure is in place, the Center for Excellence in Public Health would study the impact of the climate resiliency work in partnership with the Heart of Biddeford, the Apex Youth Connection, the Biddeford Housing Authority, the Southern Maine Planning and Development Commission, UNE faculty, and students, among others.

> "It's the perfect partnership to build infrastructure, measure impact, and then scale and write and disseminate the results."
>
> — *Michele Polacsek*

"It's the perfect partnership to build infrastructure, measure impact, and then scale and write and disseminate the results," said Michele Polacsek, Ph.D., M.H.S., director of CEPH at UNE. "City governments are not in the position to go around the country talking about a great model, but, through publication and presentations, university faculty are — because that's their job. So, it's a really great way to do this work."

Key to the collaboration between these climate and public-health advocates is applying for significant grant funding — grants that could completely transform Biddeford's low-resource neighborhood into a more sustainable and supportive community hub, one that relies less on fossil fuels and provides cleaner indoor and outdoor air for the people who live there.

Last spring, the team, led by Wake, applied a full-court press to one such grant application, an effort that culminated in the Biddeford City Council's unanimous endorsement on July 16 — and a round of applause from the public gathered in the council chambers.

"That never happens," Poupore said. "But people are kind of dying for good news about climate change. People worry about what they're being told to do ... It's about trying something together. I think that's what people were clapping about."

Enhancing climate resilience is vital, especially as the government launches grant programs like the Environmental Protection Agency's Environmental and Climate Justice Community Change Grant program, which allocates $2 billion over the next three years to assist communities disproportionately impacted by climate change and the pollution from past industries.

As of October, funding for Biddeford's climate justice initiative remained unknown. But even if the newly formed team of advocates don't land a major grant immediately, Wake is not giving up on what he calls "the beginning of a broader collaboration."

"You can do things in smaller population centers that you can't do in New York City. Here, we can build a model for what has to happen, how you make it happen, and learn what the health, environmental, and cost impact might be. It's a pilot that we can study," Polacsek said.

Wake came to UNE after a 36-year career at the University of New Hampshire, where he led some 25 mountaineering expeditions to Central Asia and the Arctic to drill ice cores and study ice core paleoclimatology, much of that work funded by the National Science Foundation. He came to UNE, he said, for "the opportunity to integrate climate change, sustainability, and the health professions, which is a really big need."

In the past year, Wake helped create a program for Summer Sustainability Fellows that matches students with mentors at businesses and organizations, and he is one of the drivers behind the new Maine SeaMade Bars initiative, which engages students across various disciplines in all aspects of supply chain, production, marketing, and sales, including harvesting kelp — a primary ingredient in the sustainable energy bars — in Saco Bay. He also traveled to the Arctic region to further and forge alliances there.

> "(If we) embraced a number of different climate action strategies and pollution-reduction strategies, this could be really transformative for this city that is already a phoenix rising from the ashes."
>
> — *Cameron Wake*

But the real groundbreaking catalyst for change Wake hopes to facilitate is the work arming the disadvantaged areas of Biddeford for the climate crisis.

"We could have focused on many other communities across Maine," Wake said. "But what we decided as a team was that, if we focused on downtown Biddeford and embraced a number of different climate action strategies and pollution-reduction strategies, this could be really transformative for this city that is already a phoenix rising from the ashes."

On the other hand, if fully funded, the team's climate justice proposal — which includes half of the 48 measures in the city's climate action plan — would elevate Biddeford as a regional leader in the fight on climate change, said Biddeford Economic Development Coordinator Brad Favreau.

"We were among the first to declare a climate emergency, and other Maine communities have asked us for advice on how to do this," Favreau said. ■

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PRESIDENT'S FORUM

In a world of soundbites and surface-level discourse, each semester at the University of New England, an event centered on the pursuit of relentless inquiry encourages students to not only ask tough questions but celebrates them. It's the President's Forum.

Established and hosted by UNE President James Herbert, the series consists of moderated discussions that address controversial topics while modeling for students how to engage in respectful and productive discourse.

In October, the President's Forum invited four national experts to present "Election 2024: Left, Right, or Unrecognizable?" in the Harold Alfond Forum on UNE's Biddeford Campus. The event addressed the 2024 election with a special focus on whether America's two main political parties are ideologically consistent enough to be viewed through the traditional left-right lens through which we understand politics.

Panelists included Verlan Lewis, Stirling Professor of Constitutional Studies at Utah Valley University; Hyrum Lewis, professor of history at Brigham Young University-Idaho; Bryan Caplan, professor of economics at George Mason University; and Robin Hanson, associate professor of economics at George Mason University. The event was moderated by Shannon Zlotkowski, M.S., assistant provost for Diversity, Equity, and Inclusion at UNE.

Underscoring the Academy's role as the ultimate marketplace of ideas, the forum allowed for open and robust discourse, presenting diverse perspectives in a respectful way.

"The four panelists offered new ways of thinking about politics that are more accurate and less polarizing," said Josh Pahigian, M.F.A., director of the UNE Center for Global Humanities, who has attended every President's Forum event since the program's inception.

"Our students can't go through life self-censoring and shying away from the topics that make them uncomfortable," Pahigian continued. "For society to function optimally, each of us needs to engage with those who think differently than we do from a position of intellectual curiosity, humility, and civility. This program gives us all the tools and encouragement to do just that."

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SEARCHING AMONG THE MOUNTAINS

by Curry *Stover*

A UNE faculty and an Animal Behavior student, in partnership with the Maine Department of Inland Fisheries and Wildlife, search for a state-threatened animal.

The rugged beauty of Northern New England is surprising to some, but undeniable to those who immerse themselves in spaces that refuse to conform to anything or anyone.

Maya Galpern (Animal Behavior and Marine Biology, '25) didn't expect to be thrust into the harsh northern landscape when she arrived at UNE, but after securing a spot on a research project run by Zach Olson, Ph.D., associate professor of animal behavior, Galpern was ready to take everything she learned in the classroom out into the Maine wilderness.

Olson aims to identify the elusive northern bog lemming, a small burrowing rodent that has been listed as state-threatened since 1986. At dawn, they drive north to the Bigelow Preserve in Stratton, Maine, don waders, and trudge into a bog where the sun beats down and bugs bite. Olson and Galpern spend hours bent at the hip, searching for animal excrement invisible to the untrained eye.

"Maya's doing a great job — it's hard work," said Olson, who has been searching for the rodent since he first arrived in Maine in 2012. Traditional wildlife tracking methods have been unsuccessful in finding this creature, so Olson and Galpern are using newer methods of determining where the northern bog lemming resides. "We're out there trying to work with an animal that we rarely detect and never see."

It's not glamorous. Some days, they go hours without finding a single sample. At the end of the day, they pack up and head straight to the lab for DNA extraction.

While the northern bog lemming may not have major economic or ecological value, its presence highlights the importance of biodiversity, Olson said. "And that's enough for us to continue the search for the northern bog lemming."

"I didn't expect to enjoy research so much," Galpern said. "One day, we'll know more about where the northern bog lemming lives, and that's really cool to me." ■

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OH! NEW ENGLAND

PIONEERING STUDENT RESEARCH FOR A BRIGHTER FUTURE

by Amy Haile

The Kahn Family Foundation, known for being champions of research initiatives, is making a lasting impact on the landscape of student research opportunities at UNE.

For Willard Swift (Neuroscience, '25), the question wasn't if he wanted to do research this summer — it was how he was going to be able to do it. He found his answer through an exciting opportunity to work with Michael Burman, Ph.D., UNE professor of psychology in the School of Social and Behavioral Sciences, with the support of a scholarship from the Robert E. and Elizabeth L. Kahn Family Foundation.

His research project, "The Effects of Early Life Arsenic Exposure in Socially Isolated Adult Zebrafish," has interesting implications for humans, Swift said. Water quality and safety are significant concerns in Maine and across the country, particularly with the presence of forever chemicals and other water contaminants.

"Zebrafish are similar to humans in terms of cortisol being a common biomarker for stress," Swift said, explaining that the study focuses on understanding how arsenic exposure might influence stress responses, with implications for human health by observing the fish's behavior and measuring cortisol levels.

Thanks to the Kahn Family Foundation, Swift said he has been able to focus on the zebrafish study without worrying about income and normal financial stressors.

"I've always known I wanted to do neuroscience research," he said. "If I wasn't doing this summer research, I would only have 10 hours a week in the lab limited by the lab materials already available."

As one of 16 Kahn Family Foundation Research Fellows, Swift's stipend includes 40 paid hours a week in the lab, summer housing coverage, and a budget for materials.

"I'm even able to attend a conference in the fall to present my research," Swift added.

The Kahn Family Foundation was created in 2017 by the children of Robert E. Kahn, M.D., and Elizabeth L. Kahn, RN, who met while doing medical research focused on supporting and improving patient care.

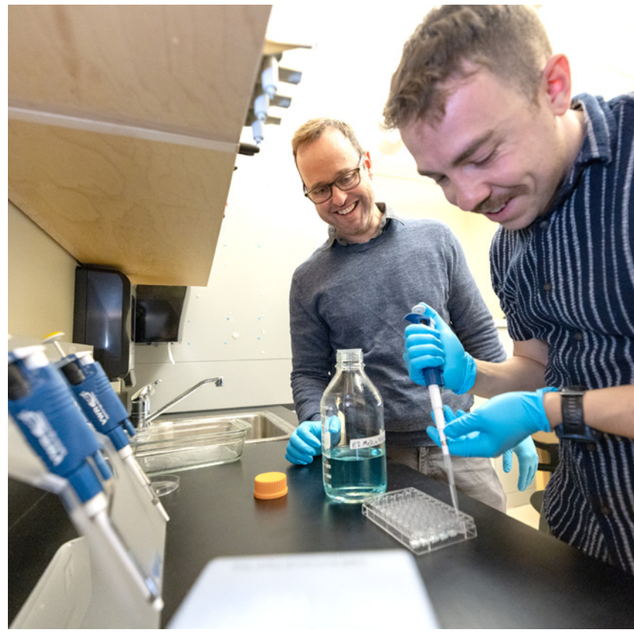
To honor their memory, the foundation provides a total of $125,000 per year in stipends to up to 16 UNE undergraduate and graduate students for creative clinical or relevant preclinical research in neuroscience, biopsychology, pediatrics, and/or interdisciplinary medicine. Students have conducted research including exploring ways to minimize pain for cancer patients and infants undergoing procedures in the neonatal intensive care unit, the relationship between concussion-related sleep and anxiety and depression, and ways to manage the sensory loss in HIV patients.

"During the summer, we often lose students who want to be here doing research because they just can't afford to do it," stated Ian Meng, Ph.D., director of the Center for Excellence in the Neurosciences and professor of biomedical sciences. "It can be a real limiting factor for students who really need to make as much money as they can over the summer to be able to afford tuition. This grant takes away that barrier."

Members of the Kahn Family Foundation are able to experience the impact of their philanthropy each year at UNE's Spring Research Symposium. Bob Kahn, a foundation trustee, noted that his parents — Robert and Elizabeth Kahn — were strident supporters of student research, and the entire Kahn family is impressed with UNE student research success shepherded by Meng.

"UNE graduate and undergraduate students, under the direction and support of Ian Meng, have generated research projects in fascinating and needed areas of science and medicine," Kahn said. "We have been very pleased to see research fellows of the Kahn Family Foundation go on to further their academic commitments in medicine and scientific research at UNE and other centers of advanced research." ■

> "UNE students, under the direction and support of Ian Meng, have generated research projects in fascinating and needed areas of science and medicine. *— Bob Kahn*"



TRAVELOGUE

CORAL RESEARCH IN THE CARIBBEAN

by Tyler Druck, B.S. '24 (Marine Sciences) with Neal Jandreau

STUDYING MARINE LIFE IN BELIZE

EXPLORING A COASTAL CARIBBEAN CITY

RECORDING BARRIER REEF BIODIVERSITY

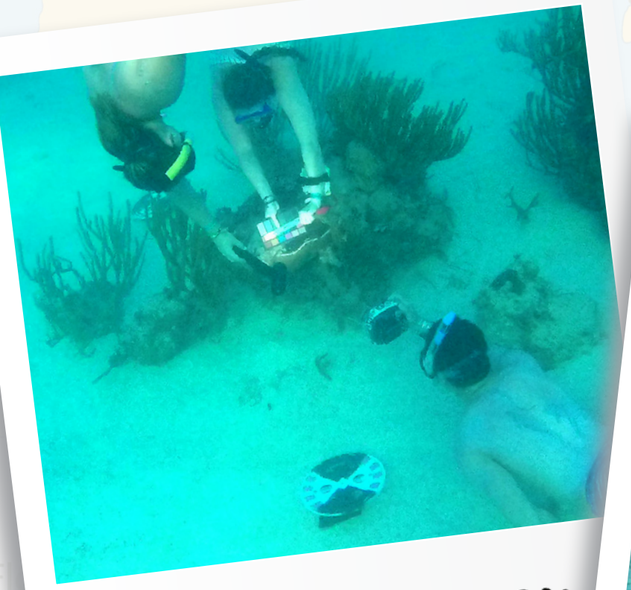
BONDING WITH MY CLASS IN BELIZE

Hello! My name is Tyler Druck, and I recently graduated with a bachelor's in marine sciences with a focus on marine biology. This past January, I traveled to Belize with a group of 28 students as part of a coral biology travel course led by Associate Professor Jeri Fox, Ph.D. We spent most of the 11-day trip learning, researching, and snorkeling along the eastern side of Ambergris Caye, an island just off the coast of Belize. We were in the middle of the Mesoamerican Barrier Reef System — the second-largest barrier reef in the world!

As we touched down in Belize City, we were immediately struck by the balmy weather and welcoming people who awaited us. It was a nice reprieve from the winter back in Maine. We explored the city as we waited for a water taxi to take us to the field station on Belize's largest island. After a two-hour boat ride to the town of San Pedro on Ambergris Caye, we took another boat to the remote location where we would spend most of our time. I couldn't wait to start snorkeling!

Twice a day, we would take a boat to different locations off the coast of Ambergris Caye and spend hours snorkeling in the clear blue water. The experience solidified my passion for the reef ecosystem, especially the coral and fish that live within it. As part of the course, we maintained a travelogue of all the species we encountered during our expeditions. Each night, as my classmates and I recorded our observations, we bonded over our love of the sea and the discoveries we were making beneath its surface.

Our field station provided a home base from which to embark on our daily excursions. We lived in humble accommodations, nestled in the wilds of the island. Living in such close quarters helped us bond and focus on our academics. Each evening, we attended an open-air lecture about local coral and fish species. To relax, we played cards, visited a nearby resort, looked at photos, and participated in Belizean activities, such as coconut husking and hermit crab racing. The hermit crabs were the size of tarantulas!



MODELING THE CORAL REEF FOR RESEARCH

DIVING WITH THE STINGRAYS AND SHARKS

Aside from the work of our class, we also participated in additional research projects while we were in Belize. During the fall 2023 semester, I helped design a camera to take pictures of the reef from different angles for a reef modeling project. Then, when I was in Belize, I spent a day helping support the primary investigators by swimming equipment out to the research location, holding equipment when it wasn't being used, and helping line up a disc to get the exact GPS location of particular reefs.

Hol Chan Marine Reserve was a truly special place where I put my much-improved snorkeling skills to the test. Located just southeast of Ambergris Caye, the reserve teems with even more species, given the deeper waters. We swam with nurse sharks and observed stingrays in Shark Ray Alley. I pushed the limits, coming as close as possible to the sharks. I found myself getting lost in the moment, swimming faster and farther afield. What a rush! My confidence was soaring.

SIGHTSEEING IN BACALAR CHICO

PURSUING MY PASSION FOR TROPICAL MARINE

I'll always remember our visit to Bacalar Chico National Park and Marine Reserve. Grateful to spend a day on land, we took a hike through the jungle, hearing unfamiliar sounds and gazing at an array of amazing species. We also participated in a beach cleanup to improve conditions for the creatures on the island and in preparation for turtles to nest later in the year. We picked up trash that washed up on the beach from the north. It felt incredible to have such a positive impact on the island!

As the sun set on our trip to Belize, I reflected on the friendships I had made and the hours I'd spent exploring this fragile ecosystem. This experience, along with my time at UNE, influenced my decision to pursue a professional master's degree focused on tropical marine ecosystem management at the University of Miami. Much like the trip, and as part of this degree, I get to spend my time exploring the kaleidoscope of colors and species found in the reef. ■

AS LUCK WOULD HAVE IT

by Windrie Cox (D.O., '26) with Joel Soloway

"So, what do you two think?" one of my classmates asked casually, in between bites of lunch in the dining hall during the autumn of our first year of medical school. She was informing me and another classmate about an opportunity to be involved in lab research — an opportunity I had never had before. "Although, I'm not so sure if there would be room for you both," she said as she peered at me with a raised brow.

I didn't need to think twice. By 5 o'clock that day, I had sent out an email to a potential mentor inquiring about a prospective research position.

Although I had grown up on the tropical, breezy shores of St. Lucia in the Caribbean, I found myself on the temperate coast of southern Maine to pursue a medical degree at the University of New England. It was a journey marked by embracing the unfamiliar — whether it was adapting to the frigid northern winters or learning how to "split" cells during my first research experience as a medical student. Suffice it to say, I was no stranger to navigating new challenges.

Within the confines of the lab, run by Assistant Professor Harry Filippakis, Ph.D., I steadily gained competency in a variety of laboratory techniques. In doing so, I proudly contributed to the lab's research of tuberous sclerosis complex, or TSC, a debilitating genetic disorder that affects multiple organ systems in the human body.

Currently, there are few treatment options for TSC, and the medications available do not cure the condition and often have unfavorable side effects. Our experiments explored key metabolic pathways in affected cells to identify drug targets so that more favorable, novel therapeutic options can be found. Although the disorder is incredibly rare, it is vitally important that this research is undertaken to both advocate for individuals burdened with TSC and hopefully improve their lives.

One of my favorite quotes by Roman philosopher Seneca is "Luck is where preparation meets opportunity." I had seized this research opportunity, but I soon discovered that there was a baseline level of experience and technical know-how required that no amount of "luck" could ever stop-gap.

As luck would have it, my research mentor, Harry Filippakis, not only possessed boundless experimental acumen but comparable amounts of patience, understanding, and willingness to teach. Under his tutelage, I garnered much insight into the world of primary research and, interestingly enough, also into myself.

Lab design can be very complex, especially in the context of our research, which centers heavily around cellular mechanisms that are distinct but still intricately influenced by each other. In short, deliberation and experimental planning were necessary to ensure that inferences drawn from our data were not by chance or some other background phenomenon. The meticulous attention to detail that Dr. Filippakis instilled in me was crucial here, reminding me of the importance of patience and thorough planning, both in the lab and in life.

Indeed, I hadn't realized — and how could I? — that before my time in the lab, performing experiments on the microscale shared many parallels with the macrocosm, which is life. My research reminds me that failure is alright, even necessary, to facilitate growth. Proper science, akin to medicine and life, is equally about doing things the right way as it is about obtaining favorable results. And unfamiliarity is a surmountable hindrance between ourselves and new horizons we feel passionate about exploring.

Looking back on the day my classmate approached me in the cafeteria, I'm thankful to have seized the opportunity that presented itself. Throughout medical school, I've continued to take on new endeavors, even if my experience is limited. After all, a great deal of medicine and life is about uncovering what is yet to be ascertained, armed only with the tools we have obtained prior. ■

PRESIDENTIAL AMBASSADORS

In the spring of 2023, I had the amazing opportunity to join the inaugural group of Presidential Ambassadors at the University of New England, a leadership training program for a select group of students who work directly with President James Herbert and First Lady Lynn Brandsma, Ph.D.

The Presidential Ambassadors play a significant role in representing the University to key partners, including donors, alums, and government officials. We, as student representatives of the President's Office, offer insights into the UNE student experience at various events, both on and off campus.

Our program stands at a unique intersection of leadership and University involvement. Under the mentorship of President Herbert and First Lady Brandsma, we learn the skills necessary to become successful leaders, not only in higher education but also in life. Having the honor to work alongside University stakeholders and decision-makers allows us to practice and refine skills such as professionalism, collaboration, and effective networking in real-world settings.

As the Presidential Ambassador program continues to grow, we have seen its impact extend beyond University walls, as we have worked to foster and strengthen UNE's partnerships within our local and national communities while building strong relationships with University friends.

While we have accomplished so much in our first year, I am most proud of our sense of family. It is a testament to our current members and alums that we have formed bonds into what we know will become lifelong friendships, and for that, I am genuinely thankful.

— Will Ledbetter, *2024–25 Co-President*


April Falstad

A RARE PAIRING OF COLLEGE STUDIES, SPORTS, AND APPLIED RESEARCH

by Curt Smyth

At an institution where students are encouraged to explore their passions, enhance their scholarship, and impact the world, student-athletes Dawn DeWeese-Moss ('25) and April Falstad ('25) live that mantra. In addition to the rigor of their undergraduate course loads and the commitment of being NCAA Division III student-athletes, DeWeese-Moss and Falstad are fully immersed in undergraduate student research at the University of New England.

DeWeese-Moss, of Pittsfield, Maine, an applied exercise science major within the Westbrook College of Health Professions, is conducting research in the laboratory of UNE Professor Paul Visich, Ph.D., M.P.H., while Falstad, who hails from Arden, Delaware, is an undergraduate research assistant under the direction of UNE Professor Glenn Stevenson, Ph.D.

> "(The research) directly relates my studies within the field of exercise science to that of the medical field."
>
> — *Dawn DeWeese-Moss*

DeWeese-Moss, who aspires to have a long career in the medical field as a physician assistant, is studying medication used to treat depression, called a selective serotonin reuptake inhibitor (SSRI), which can cause mild muscle pain, but its specific effects on delayed onset muscle soreness remains unclear.

"(The research) directly relates my studies within the field of exercise science to that of the medical field — especially as we are investigating a potential link between SSRI use in athletes and other college-aged students to rhabdomyolysis," she said, adding that she really loves the applied nature of the research to her field of study.


Dawn DeWeese-Moss

Having worked in the psychopharmacology and neurobiology research lab for three years now, Falstad, a medical biology major in the College of Arts and Sciences, is investigating dual-acting opioids and the effect they have on behavior and pain relief.

"Ultimately, our goal is to contribute research to find effective pain relief without the undesired side effects of opioids that are used today," Falstad stated, noting that, in April 2023, she was published as a third author in the *Journal of Pain*. "We hope that, one day, these less-addictive opioids will become the new standard for medical prescriptions."

While both DeWeese-Moss and Falstad have regularly made the Dean's List and are accomplished student researchers, each carve out the time to play a key role in the success of their respective varsity teams.

The starting goalkeeper last season for the field hockey team, DeWeese-Moss was named a National Field Hockey Coaches Association Scholar of Distinction. Heading into her senior season, she had posted a .707 save percentage and two shutouts over 28 games and was a member of the 2022 squad that captured the Commonwealth Coast Conference championship.

Falstad, who competes in the breaststroke, individual medley, and freestyle events for the Nor'easters women's swimming team, is a two-time member of the Little East Conference Academic Honor Roll. In her first season with the Nor'easters, she coupled with Haley Griffin, B.A. '22 (Marine Affairs), Annika Doeppers, B.S. '25 (Marine Sciences), and Katie Durrua, B.S. '24 (Nursing) to establish what was a school record at that time in the 800-yard freestyle relay.

Both DeWeese-Moss and Falstad acknowledge the importance of time management and organization in successfully balancing their hectic schedules. Neither of the two chose UNE exclusively because of the research opportunities but recognized the significance it has had in their academic paths.

> "It has allowed me to gain a deeper understanding of the scientific publishing process beyond what is taught in the classroom."
>
> — *April Falstad*

"It was important for me to find a research opportunity that relates to my future goals," DeWeese-Moss said. "For that reason, I only recently started partaking in this research project here at UNE, although there were plenty of other great opportunities along the way."

Falstad agreed but has a slightly different take. While she initially selected UNE for its coastal location, access to outdoor adventures, and study abroad opportunities, she has been able to contribute to research in a meaningful way.

"Getting involved in research on campus has given me hands-on experience with important pharmacology development," she said. "It has allowed me to gain a deeper understanding of the scientific publishing process beyond what is taught in the classroom." ■


Jordyn Franzen


Damien Jones


Kelsey Hartigan


Billy Girard IV

LEADING BEYOND THE SCOREBOARD

UNE student-athlete 2023-24 award recipients.

by Curt Smyth

Beyond the roar of the crowds, Athletics teams and student-athletes at the University of New England made a positive impact in and outside of competition during the 2023-24 academic year. Their accomplishments are remarkable, from the men's ice hockey team soaring to fifth in the national poll to 47 student-athletes achieving a 4.0 GPA in the spring 2024 semester.

Beyond personal success, these student-athletes are also community stewards. In the fall of last year, the men's and women's lacrosse teams raised more than $6,700 for the MaineHealth Barbara Bush Children's Hospital with proceeds from the 15th annual Lax-4-Life fundraiser — just one way that UNE's student-athletes impact the local community.

Here, we highlight the winners of UNE's annual Athletics awards for the 2023-24 academic year.

SENIOR SCHOLAR-ATHLETES
Emily Martin ('24), Sienna Matregrano ('24), and Karl Mohr ('24)

A nursing alum and member of the women's soccer team, Martin was a member of Chi Alpha Sigma and voted the 2023 Commonwealth Coast Conference (CCC) Women's Soccer Scholar-Athlete of the Year. A track and field student-athlete who majored in applied exercise science, Matregrano was also a member of Chi Alpha Sigma and selected UNE's Outstanding Student for Biological Sciences. Mohr, a member of the men's soccer team, was a three-time academic all-conference selection and a Chi Alpha Sigma inductee.

ATHLETES OF THE YEAR
Jordyn Franzen ('24), Nina Parziale ('25), and Billy Girard IV ('24)

Franzen was the top player for the women's basketball team and finished her career with 1,121 points. At the conclusion of the 2023-24 season, she was voted first team all-conference, first team all-state, and was a participant in the New England Senior All-Star Game. Parziale, a member of the cross country and track and field teams, became the first UNE runner from the women's cross country program to qualify for the NCAA Championship. At the New England Track and Field Championships, Parziale placed third with a school-record time. Girard, a four-year starter for the hockey team, was named CCC Goaltender of the Week six times and broke a school record with a .928 save percentage. He was voted second team all-conference and concluded his career first all-time in wins and goals against average.

ROOKIES OF THE YEAR
Mic Hujus ('27) and Damien Jones ('27)

Hujus had one of the most decorated seasons that a member of the swimming team has had, winning Little East Conference (LEC) Rookie of the Week honors a remarkable seven times and the LEC Rookie of the Year. At the conference championship, she set two meet records while setting three team records during the season. Jones played a key role in the football team's success, totaling 685 yards and eight touchdowns. On three occasions he was named CCC Offensive Rookie of the Week and was voted the CCC Offensive Rookie of the Year.

JAMES A. BEAUDRY AWARD
Kelsey Hartigan ('24)

The Beaudry Award is given annually to the senior student-athlete who best exemplifies the qualities of Jim Beaudry, the legendary coach and athletics director at UNE precursor institution Saint Francis College —sportsmanship, ethics, and contributions to the University community. Hartigan was a two-year captain for the women's lacrosse team and a three-year member of the Student-Athlete Advisory Committee. In addition to her impact within Athletics, she served as the Class of 2024 vice president and shared her time as an Admissions tour guide and resident assistant, in addition to working in the athletic training room and at the Danielle N. Ripich Commons on the Biddeford Campus.

CHAMPION OF EQUITY AND INCLUSION
Elizabeth Goodrich ('25)

The Champion of Equity of Inclusion is awarded annually to a student-athlete leader in the space of equity and inclusion, regardless of what year the student is in college. Goodrich has been a cornerstone member of the Female Athlete Alliance (FAA) since stepping foot on campus and served as the group's vice president for 2023-24. A member of the women's rugby team, she played a key role in orchestrating National Girls and Women in Sports Day programming here at UNE. Goodrich also helped facilitate discussions among the FAA on coverage of NCAA Women's Basketball, as well as March Madness.

2024 HOMECOMING AND FAMILY WEEKEND

by Amy Haile

The University of New England's Biddeford Campus buzzed with energy as over 3,000 alumni, families, and friends converged for Homecoming and Family Weekend in early October. The event showcased the vibrant spirit of UNE's athletic and academic prowess, weaving together the past and present of the Nor'easter community.

Fans rallied behind UNE's athletes, cheering on football, soccer, volleyball, and field hockey teams. Alumni from men's basketball and lacrosse proved their enduring skills in spirited games, bridging generations of Nor'easter athletes.

The Fall Research Symposium spotlighted student scholars, demonstrating UNE's commitment to foster intellectual curiosity. Guided Saco River boat tours offered by the Arthur P. Girard Marine Science Center staff highlighted the University's connection to its coastal environment, and Nick Blunier '12 provided a creative outlet with fun crafts for all ages at his art bus, which was parked at the Harold Alfond Forum.

The weekend honored alumni, celebrating their academic excellence, athletic achievement, and successes, which underscored UNE's role in shaping future leaders and innovators while reinforcing the University's commitment to holistic education and community engagement.

Four former student-athletes were inducted into the UNE Varsity Club Athletics Hall of Fame: Brady Fleurent '19 (men's ice hockey), Trevor Fleurent '17 (men's ice hockey), Jolena Lampron '18 M.S.O.T. '22 (women's lacrosse), and Avery Alberghini Laperle '19 M.S.O.T. '21 (softball).

Three distinguished alumni received recognition for their achievements and contributions to the UNE community: Joseph Sekera '66 received the M. Ben Hogan Alumni Achievement Award; Anda Panaitiu '11 was recognized with the Young Alumni Award; and Jeff Scher was celebrated with the Honorary Alumni Award.

BRIDGING THE GAP BETWEEN CONSERVATION AND RECREATION IN LOCAL COMMUNITIES

by Angela Coulombe

Julianne Lapiere ’24 and Mia Meister ’24

As Julianne Lapiere and Mia Meister led a tour of Meadow Woods Preserve within the Kennebunkport Conservation Trust (KCT) in August, Lapierre paused to point out a particular plant.

“Common mugwort was brought to the states from Europe for medicinal purposes. Even though it is an invasive species to Maine, it makes great tea,” she said.

Lapiere and Meister are participants in the inaugural cohort of the UNE Summer Sustainability Fellowship, which pairs UNE students and graduates with local municipal, business, and nonprofit community partners to collaborate on sustainability projects.

Lapiere and Meister are using the environmental and geographic information system (GIS) mapping skills they developed while in school to work with the KCT to deliver a plan for invasive species management and a perimeter trail for the Meadow Woods Preserve that reflects the interest of the KCT community and is compatible with the existing ecosystem.

“As a marine science major, I gained a lot of GIS experience that I use daily and is integral to this project,” Meister said.

The UNE alumni aim to bridge the gap between conservation, education, and recreation in southern Maine while ensuring that beautiful places like the Meadow Woods Preserve are available and accessible to future generations.

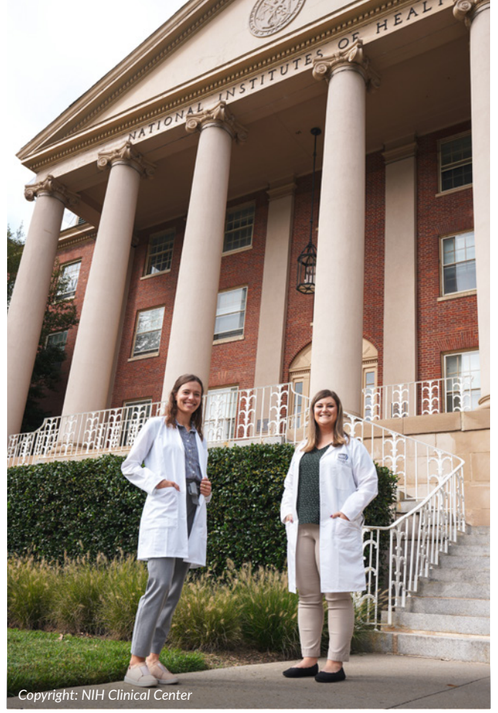
“Our project addresses biodiversity issues, such as invasive species management, while preserving and maintaining biodiversity,” said Meister. “Preserving areas like the Meadow Woods Preserve will play a role in stabilizing our ecosystems while allowing local communities access to nature and encourage people to care and get involved with preservation efforts while inspiring other communities.”

Lapiere and Meister credit their UNE experience with opportunities and skills they have gained to make strides with this project.

“Through UNE, I have made multiple connections within the local communities of Biddeford and Kennebunkport, including the Kennebunk Conservation Trust, to find properties to use as a lab to gain hands-on experience managing invasive species and other environmental and conservation work. Now, as a Summer Sustainability Fellow, I’m using these same skills daily,” explained Lapiere.

For Lapiere and Meister, the most exciting aspect of the project is the flexibility they have had to contribute their ideas and use their backgrounds, creativity, and knowledge to expand on their project deliverables.

In the end, Lapiere and Meister said they want people to be as passionate as they are about sustainability and the preservation of local ecosystems, and, of course, common mugwort tea. ■



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IMPROVING PATIENT CARE OUTCOMES AT NIH CLINICAL CENTER

by Victoria Wilbur ’21

Leslie Bardin, B.S. ’15, M.S.O.T. ’17 and Alexandra St. Clair, M.S.O.T. ’17

For Leslie Bardin and Alexandra St. Clair, making an impact on vulnerable communities through applied research at UNE led them to pursue occupational therapy work at the National Institutes of Health (NIH) Clinical Center in Bethesda, Maryland.

As part of the inaugural class of UNE’s Health, Wellness, and Occupational Studies program (now Occupational Studies), Bardin was eager to innovate a unique approach to occupational therapy (OT). She was part of the Neuroscience Club as an undergraduate, volunteering with the Goulet Foundation to bring free helmet fittings to the community.

Bardin also worked with the Center for Excellence in the Neurosciences through graduate school, doing case studies on sensory modulation methods for veterans with post-traumatic stress disorder. St. Clair was part of the same cohort as Bardin, and they often worked together on class assignments. St. Clair tested self-soothing sensory strategies for pediatric mental health patients. Because of this, they both learned that collecting and sharing data about best treatment practices is the key to driving future patient outcomes forward.

“It was really interesting to put myself out there and take these unexpected opportunities,” Bardin said, “It was there in the pain labs and volunteering in the community where I learned the importance of the occupational therapist’s role in the medical field.”

> “It was really interesting to put myself out there and take these unexpected opportunities.”
>
> *— Leslie Bardin*

While practicing in OT clinics after graduation, Bardin and St. Clair longed for the creative problem-solving opportunities they found in their UNE research experiences. They soon found themselves at the NIH Clinical Center, where each patient has a research protocol attached to their care. As occupational therapists, Bardin and St. Clair have the freedom to expand treatment options for their patients and make a difference for patients through the lens of occupational therapists.

“We collect data for various projects, but we can also do our own projects,” said Bardin.

As a licensed hand therapist, St. Clair’s research examines how daily upper extremity function is impacted by a patient’s condition. Bardin’s research focuses on using health and wellness education to create protocols to overcome socioeconomic barriers facing intersex patients, which impacts their overall wellness. ■

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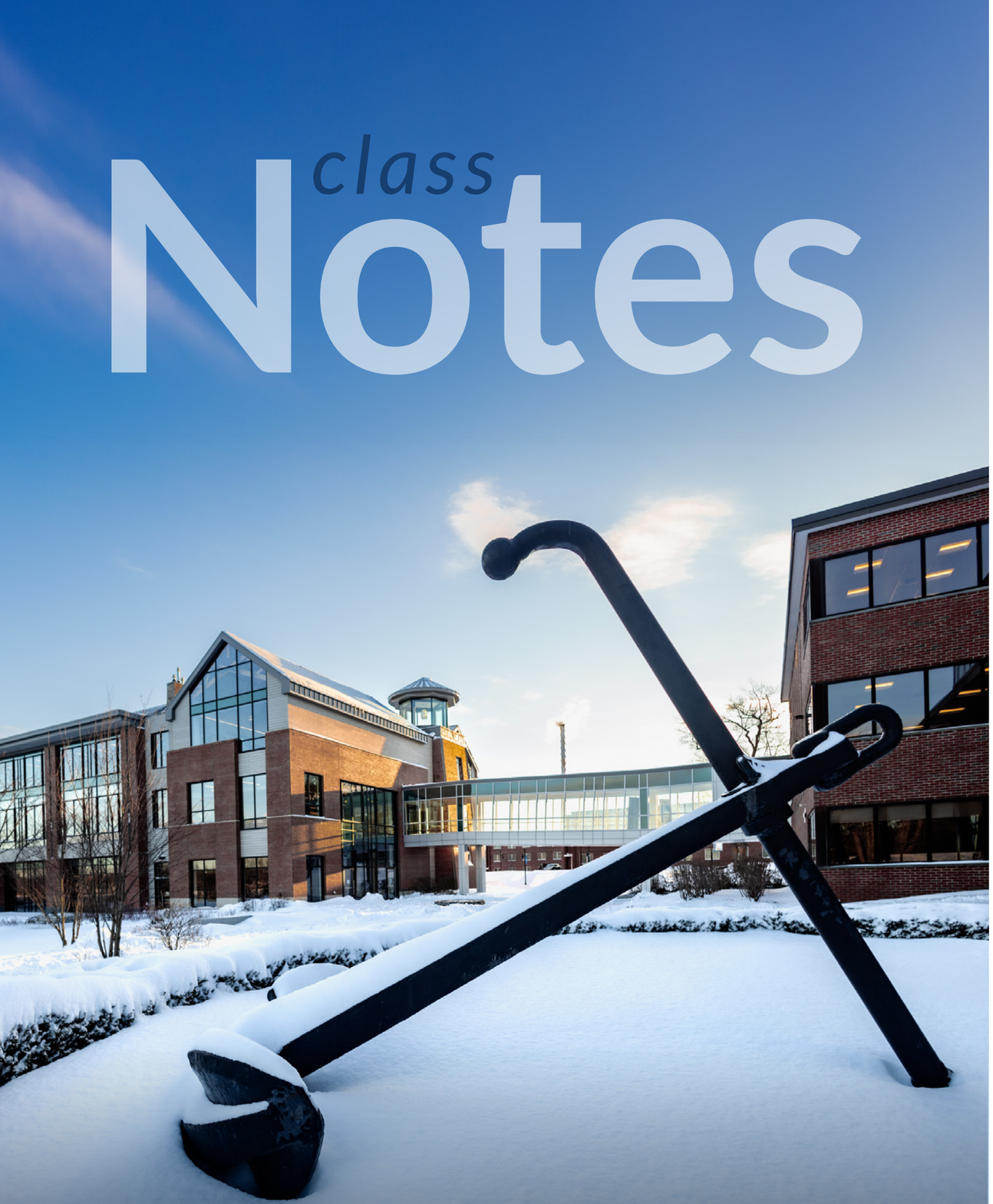


class Notes

Please email your news and photos to alumni@une.edu, post on UNE Connect at www.alumni.une.edu, or mail to the UNE Office of Alumni Advancement, 716 Stevens Avenue, Portland, ME 04103. College of Osteopathic Medicine news should be emailed to RSAS@une.edu.

Please limit submissions to 75 words or less. Submissions may be edited for length and clarity.

1944

Elizabeth Cooper MacLead writes: I enjoyed going to Westbrook Junior College as a day student. Our group was the only class to graduate in one-and-a-half years in February 1944 due to the need for medical secretaries during war time. It's wonderful to watch the school grow.

1964

Sue Umpa Angevine writes: Where have all the years gone! Greetings to all my classmates whom I've lost touch with. I've been living in San Jose, California, for 40-plus years with many trips back to my beloved New England. After retirement from my school district, my husband and I were fortunate to do a fair amount of international travel. My husband passed away two years ago. My oldest son lives in Park City, Utah, with his wife and 3- and 5-year-old sons. Seth works on the mountain and is an EMT. My younger son lives on the coast here in California with his wife and 11-year-old stepson. Josh is employed at Half Moon Bay Golf Links. My sister and I continue to travel together with multiple trips to Stowe, Vermont, back to our roots. Definitely slowing down but very grateful for every day. Best to all.

Jocelyn Taylor Baubout writes: Sorry to miss the reunion. I have happy memories of my two years at Westbrook. I graduated with a B.A. from the University of Wisconsin. I worked on and off as a dental hygienist in Virginia and Minnesota. I changed careers and worked for 24 years for Social Services. I retired after nine years as a team operation manager. In retirement, I volunteer at a food pantry. I have been married for 59 years to Charlie. I have two children, Jason and Ann.

Nancy Osgood Lebel writes: The door is always open and coffee is always on! Would love to see anyone anytime.

Phyllis Green McClellan writes: I have lived in Mt. Pleasant, South Carolina, for 11 years now. My daughter, Amanda, her husband, Joe, and their children, Amma (17), Grace (15), Maddie (13), and Mac (4) live five minutes from us. My son, Ted, lives two minutes away. Jimmy died in February of 2022 after 56 years of marriage. I still volunteer at my church, cooking for community suppers and the annual Tea Room, where we raise funds for community outreach projects. I had my 10th year anniversary of working at Target at the service desk for 15 to 20 hours a week. I'm still maintaining one day at a time, one foot in front of the other.

1969

Cindy Gray Pidacks writes: I was a medical secretary at the Joslin Diabetes Center in Boston for 27 years. I then worked at a rehab and long-term care facility for 21 years. I retired in 2018. I enjoyed my 55th reunion in June and I wish that more alumni from 1969 attended. It was nice seeing Susan Libby and reminiscing about our class.

1971

George Kudlacik writes: The Class of 1971 was well represented at the UNE Annual Vaughn Twaddel Golf Classic in May at the Dunegrass Course. Bo Lelacheur, Ron Dubuque, George Kudlacik, and Tim Lenehan are pictured. Missing from the picture was Tommy Nichols who was out on the course.

1974

Deborah Drucker writes: Wow, so much to cover. I married Steve Spader in June 1976. Our son, Erich, was born in October 1977 during the Yankees World Series. Chad arrived five years later in 1982. I worked at various bookkeeping jobs and went to college in 1989 at Eastern CT State University, graduating in 1992 with high honors. I worked as an accountant for a prison release program for a few years. I also volunteered for the local DV/SA crisis centers as an advocate. I worked in Litchfield County for many years in the courthouse as a family violence victim advocate. When my oldest went to Iraq in 2004, I returned to Groton working full time at Women's Center of Southeastern Connecticut as program director of the transitional housing program for domestic violence victims. In 2005, I became a Sexual Assault Response Coordinator (SARC) for the Navy and worked at the Naval Submarine Base New London for 12 years. In 2016, I was named Exceptional SARC of the Year for the Navy. I was presented with the award by Secretary of Defense in a ceremony conducted at the Pentagon with other branches of the military. I took a temporary position overseas in Djibouti for a year as the SARC at the Navy's military base Camp Lemonnier. It was the most rewarding experience of my life. After completing my year in Djibouti, I returned to the U.S. briefly before moving to Italy as the Regional SARC for Europe, Africa, and Southwest Asia. I returned stateside prior to the pandemic and took care of my ex-husband, who was terminally ill. Steve passed in June 2021. I have traveled a great deal, but my most important and greatest joy is my seven grandchildren: Madison (26), Belah (21), Ezra (18), Caleb (12), Arya (8), Sterling Hendrix (7), and Ella Simone (5). In June, I will become a great grandmother! No life is perfect, but mine has been a crooked journey that has given me many experiences which have allowed me to grow.

Laura Lurie writes: I quit dental hygiene, which I had practiced for 46 years, when we all had to stop for COVID. I found a part-time job three months later, a mile from my house, as an accounting assistant. My son and his wife gave us a beautiful grandson, now 3. My daughter married in 2021, and both kids are doing well. My husband Jeff retired six years ago. Happy — can't ask for more.

1989

Michael Dorick, D.O., writes: I continue to practice medicine and I am the lead physician for the Ryan White program at Coastal Family Health Center on the Gulf Coast of Mississippi. We serve and manage over 550 active in care HIV patients. It's been a long road since

graduation from UNE COM. I did a rotating internship, an OB/GYN residency, a family medicine residency, and am now a certified HIV specialist through the American Academy of HIV Medicine. I can say that it was UNE COM that planted firm, solid medical training at the start!

1994

Paul Peterson writes: To the Class of 1994, I hope you are all well and enjoying life. I retired from the FDNY after 27 years in May 2023. My family life is great and I have been married to Laura for 21 years. We have two boys — Colin (19) just finished his freshman year at The Catholic University of America in D.C., and Travis (16) is a sophomore at Xavier High School in Manhattan. I am in touch with a bunch of the Westbrook Wildcat Hoops family. Derek Vogel was just honored and inducted into the NAIA hall of fame. I spent winter skiing with Ron Crosby and Andrew MacVane.

Kneka Smith writes: After earning a doctorate in education from A.T. Still University in Kirksville, Missouri, in 2019, I have been back in Portland for four years with my family. I'm serving as vice president of academic affairs at MaineHealth. I work with a variety of learners, innovators, and researchers to improve health. With four active high schoolers, it's always busy and fun!

1997

J. Wilson Mueller self-published his first children's book, "I Flew Again Last Night: Meeting Harriet Tubman," in May 2024.

1999

Dana Nero Steniger writes: Best of luck to the graduates of the class of 2024. May you treasure your time spent at UNE, and grow in your chosen profession. I will never forget my time at UNE and, 25 years later, I still love being an occupational therapist.

2003

Ernie Cote successfully defended his Ph.D. dissertation in neurobiology at SUNY Downstate Medical Center. Ernie worked in the lab of Linda Morrison, Ph.D., at UNE and went on to earn master's degrees from Hunter College and The New School. Cote is a practicing psychotherapist in Brooklyn, New York, and works as a psychology professor at Hunter College and the NYC College of Technology.

2004

Jessica Bolduc, O.T.D., was selected as one of four inaugural national fellows by The Administration for Community Living (and National Council on Aging) to cultivate leaders in the fall prevention network to explore, research, and champion systems change solutions focused on mitigating older adult falls, fall risk factors, and fall-related injuries to reduce the personal and financial costs of older adult falls and improve the lives of older adults.

Paul Peterson

Scott Hamilton and family

Christina Perazio

Mark Goode

Tamkeen Abreu and family

Scott Hamilton, D.O. '08: I am working as an emergency physician in Southern Maine and raising two wonderful children!

2006

Heather Wright writes: After completion of my Master of Philosophy thesis in 2013 through the Open University Affiliated Research Center at the Zoological Research Station in Naples, Italy, I worked as a biologist and applications scientist in Maine. After the covid pandemic, I returned to academic teaching at Connecticut State Community College. After a cross-country move to the Southwest U.S., I accepted a full time faculty teaching position with Mohave Community College, where I continue to teach environmental science and other biological courses while staying involved in community outreach.

2008

Christine Mahoney, D.O., recently assumed the role of director of Health Services at Bowdoin College.

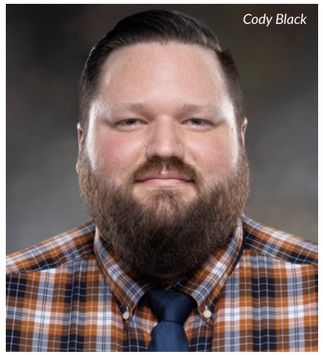
2009

Mark Goode, PA, was named a 2023 Outstanding Health Care Professional of the Year, an award presented annually by Maine Association of Physician Assistants to a health care professional who, through their efforts, has demonstrated exceptional clinical knowledge and teaching skills in support of the PA profession and contributed to the improvement of health care in the state of Maine. Goode is a co-manager of the Hospital Medicine APP service for the southern region at MaineHealth. He is also the co-director for the MaineHealth Acute Care Pod, created in 2018.

2011

Christina Perazio was recently hired as a clinical assistant professor in the Department of Psychology at SUNY Buffalo. After attending UNE, Christina went on to earn her Master of Science from the University of Mississippi and her Ph.D. from the University at Buffalo. She specializes in animal communication and cognition and is particularly interested in how boat noise may impact humpback whale song structure as they attempt to communicate amidst ever-increasing noise in our oceans.


Emily Bosivert


Cody Black

2012

Tracy Gibson has been named the new school principal of Sanford High School.

2013

Tamkeen Abreu, Pharm.D., BCPS, clinical pharmacy specialist at Ascension Health, and Pedro Aramis Abreu, lead UM pharmacist for medicare and retirement at UnitedHealth Group, have been settled back in the Chicagoland area since graduation. Now with a family of two, Mikail (5) and Alina Zara (3), and cat Mancha (13), adopted in Maine. They enjoy traveling, the outdoors, cooking, and giving back to the community through various philanthropic activities.

Krystal Mecum, Pharm.D., writes: As a Hannaford Pharmacy Manager, I recently worked with my IPPE students to educate the Scarborough, Maine, community on the availability of over-the-counter naloxone and oral contraceptives. Community pharmacy is an important and valuable practice space and we love to see the patient outreach.

2014

Shelby Peterson returned to the Biddeford Campus to teach an Art Therapy Course for the spring 2024 semester. After earning her Bachelor of Arts at UNE, Peterson went on to earn her master's in expressive arts therapy from William James College in Massachusetts.

2015

Julian Kingsley recently graduated from SUNY Upstate Medical University with a Master of Science in clinical perfusion.

2016

Emily Boisvert is program manager at New Hampshire Housing. She has always had a passion for non-profit work. At UNE, she spent her spring breaks building homes with Habitat for Humanity. A few years ago she led a major rental assistance program that kept thousands of people housed. She reports that she is so grateful to now see how the path she was on brought her to exactly where she is meant to be.

Alyssa Mixon Cole, D.O., published, "Examining the Coverage of D.O.s in the Mainstream Media" in *The DO*, the American Osteopathic Association's publication for osteopathic physicians, by osteopathic physicians. Cole's article aims to explain, "why better and more accurate representation" of osteopathic medicine doctors is needed across the media spectrum.

Ainsley Price, PA, was awarded the Maine Association of Physician Assistants 2023 PA of the Year Award. The Maine PA of the Year Award is presented each year to a Maine Physician Assistant in recognition of their dedicated service to the community with an emphasis on their ability to inspire others to become involved with serving their communities, as well. Noting the lack of referral options for comprehensive obesity management in the Waldo County area and the state, she obtained additional certification and set to opening a clinic dedicated to this area of care.

2017

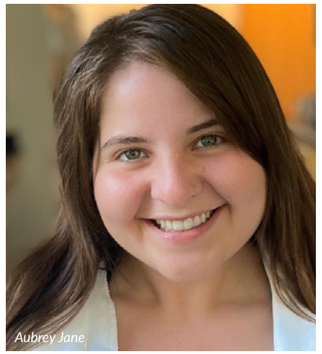
Emily Vasseur received her master's degree in clinical mental health counseling at Johns Hopkins University, and is now a licensed counselor. She just opened her own private practice, Mountain View Wellness and Consulting, in Columbia, Maryland.

2018

Cody Black, Pharm.D., writes: After graduating from UNE, I worked full-time as a LTC pharmacist for a year, and then went back to school at the University of Texas to get my Ph.D. in Translational Science. I am now a postdoctoral research fellow at UT Health San Antonio, working on understanding how to treat and detect non-carbapenemase-producing, carbapenem-resistant bacteria. I also work part-time as a clinical pharmacist at University Health here in San Antonio, all thanks to my degree from the University of New England College of Pharmacy!


Emily Vasseur


Alyssa Weinstein


Aubrey Jane

2019

Mackenzie Deveau graduated from UMaine Law in 2022 and currently serves rural areas in northern Maine as part of the rural defender unit.

Matthew Heindel, PT, D.P.T., is the recipient of the Viva J. Erickson Award for the promotion of doctoral studies. Heindel's project, "Central and Peripheral Mechanisms of Rotator Cuff Tendinopathy and Exercise," is made possible by the Viva J. Erickson Endowment Fund.

Jenni Laferriere spent several weeks of early 2024 in California at the Rhinos Rugby Academy. She currently plays center for Beantown Women's Professional League in Boston, Massachusetts, and is a speed, strength, and conditioning coach in Yarmouth, Maine.

Michael Smith, Ed.D., has been promoted to head of implementations at Epion Health, powered by Kyruus. In this role, Smith is responsible for development of all educational materials for all implementation team members.

Alyssa Weinstein writes: I am happy to share that since graduating from UNE in 2019 with my bachelor's in medical biology, I have completed my master's in biochemistry and molecular biology at Johns Hopkins Bloomberg School of Public Health and am now working towards my Ph.D. in Cancer Biology at Washington University in St. Louis. I wouldn't be where I am now without the excellent mentorship I received while I was at UNE. My experiences through my coursework and in the lab formed my current research interests and provided me with a strong foundation to pursue a career in STEM.

2020

Aubrey Jane, M.S. '24, is one of just 85 people from across the country who were picked for the John A. Knauss Marine Policy Fellowship. The fellowship provides a unique educational and professional experience to graduate students who have an interest in ocean, coastal, and Great Lakes resources and in the national policy decisions affecting those resources.

2021

Katharina Roese, M.S. '23, is lead manuscript author for the paper, "Pyrogallol Impairs Staphylococcal Biofilm Formation Via Induction of Bacterial Oxidative Stress" which was recently published in the Journal of Applied Microbiology. Co-authors include Professors Amy M. Deveau, Ph.D., and Kristin Burkholder, Ph.D., Ursula S.R. Röse, Ph.D., Christina Torlone '21, Lauren Cooper '23, and Lee Esposito '20.

2022

Emily Williams was recently promoted to research associate at the Mindbridge Center, where she contributes to the Research and Evaluation department and the Countering Extremism Directive. Mindbridge is a nonprofit that takes on human rights issues from an applied psychological lens.

2023

Hanna Freeman, RN, received the DAISY Award for Extraordinary Nurses in 2023. Her quick action when a newborn displayed unexpected behavior resulted in a positive, healthy outcome for a family at Maine Medical Center in Portland. The DAISY Award for Extraordinary Nurses was created to recognize and honor the compassionate care which nurses provide every day to the patients they serve.

Emily Newborough has been accepted into the clinical mental health counseling program at Marymount University. She is now a dual degree master's student for forensic and legal psychology and clinical mental health counseling.

Charles Swan, Ed.D., principal at Dirigo Elementary School in Peru, has been named Maine's NAESP National Distinguished Principal for 2024. Swan was chosen because he has a leadership style that encompasses all of the avenues in a beautiful blend. He is reflective, authentic, genuine, innovative, data-driven, humorous, and student and community focused. He has a great balance between fun and pushing staff forward to continue to strive for excellence. ■

1941

Helen Keith Deardorff
Westbrook Junior College
December 16, 2016

1943

Marcia Lounsbury Richmond
Westbrook Junior College
July 1, 2022

1944

Harriet Dodge Allen
Westbrook Junior College
September 28, 2021

Betty Fitzgerald Duncan
Westbrook Junior College
September 13, 2016

Genevieve Tucker Fleming
Westbrook Junior College
February 22, 2017

Marilyn S. Hall
Westbrook Junior College
March 21, 2022

Joan Harrington
Westbrook Junior College
March 12, 2019

Annette Fuller Lee
Westbrook Junior College
August 21, 2020

Jean Hoffman Yanofsky
Westbrook Junior College
December 9, 2018

1946

Pauline Bayer-Lally
Westbrook Junior College
September 21, 2023

Barbara Jackson
Westbrook Junior College
February 17, 2024

1948

Hilda Bolle
Westbrook Junior College
October 22, 2023

Jean Thomas McMullen
Westbrook Junior College
June 16, 2023

1949

Ruth Southworth Baker
Westbrook Junior College
November 27, 2023

Marilyn Smith Brown
Westbrook Junior College
October 4, 2023

Jean Hornby Cronin
Westbrook Junior College
January 25, 2024

Diantha Ann Holbrook Dower
Westbrook Junior College
May 19, 2020

Cleo Nichols George
Westbrook Junior College
February 29, 2024

Barbara Libbey Goodof
Westbrook Junior College
February 1, 2024

Janice Henderson Hamilton Hanly
Westbrook Junior College
January 8, 2024

Caroline Chapman Hills
Westbrook Junior College
November 2, 2023

Joan Livingston
Westbrook Junior College
September 9, 2023

Constance Wood Murray
Westbrook Junior College
August 27, 2022

Jane Brown Petschaft
Westbrook Junior College
October 16, 2023

1950

Dorothy Quimby
Westbrook Junior College
November 9, 2023

1952

Gloria J. Gendron Chase
Westbrook Junior College
July 31, 2022

Patricia Dubrule
Westbrook Junior College
August 12, 2023

Berdine Elaine Tracy McCord
Westbrook Junior College
April 29, 2024

1953

Joyce Kelley Butler
Westbrook Junior College
December 17, 2023

Christina Colello Mortimer
Westbrook Junior College
May 13, 2024

1953

Jean Gregan Wortman
Westbrook Junior College
November 30, 2022

1954

Jeannine Prince Forbes
Westbrook Junior College
March 18, 2024

Jo Ann Clark Frost
Westbrook Junior College
April 5, 2023

Ruth Barnes Jensen
Westbrook Junior College
August 5, 2019

Jane Dunning Garland Shubert
Westbrook Junior College
July 15, 2022

1956

Judith Greenhalgh Nelson
Westbrook Junior College
May 8, 2024

Jacquelyn Hall Snelling
Westbrook Junior College
June 24, 2023

1958

Constance Dean Henderson
Westbrook Junior College
May 22, 2023

1960

Carolyn Swett Lee
Westbrook Junior College
January 2, 2024

1961

Hilary Nowers Fleming
Westbrook Junior College
January 28, 2024

Shirley Holcombe
Westbrook Junior College
March 1, 2024

Paula Evans Lanni
Westbrook Junior College
July 27, 2023

Gail Linda Toll Sinitski
Westbrook Junior College
November 7, 2023

1962

Susan MacDonald Baskin
Westbrook Junior College
May 23, 2024

Elizabeth Putnam Caswell
Westbrook Junior College
April 24, 2017

1963

Anna Cutler
Westbrook Junior College
May 5, 2023

1964

Paula Simonds Becker
Westbrook Junior College
March 11, 2024

Gerard Burke
Saint Francis College
February 16, 2024

Lee Sable Freund
Westbrook Junior College
March 4, 2021

James King
Saint Francis College
October 20, 2023

Karen Asbjornson O'Jala
Westbrook Junior College
October 20, 2023

1965

Donna Davieau Chatterton
Westbrook Junior College
September 26, 2022

George L. Findlen
Saint Francis College
February 2, 2024

William Masterson
Saint Francis College
November 14, 2023

1966

Michael Gilroy
Saint Francis College
October 30, 2023

Lorraine Oggenfuss Kert
Westbrook College
January 9, 2021

1967

Albert Cormier
Saint Francis College
November 26, 2023

Katherine Gorham Wallace
Westbrook Junior College
December 15, 2023

1968

Thomas W. Sheehan
Saint Francis College
October 26, 2023

1969

Beth Emery Caron
Westbrook Junior College
March 2, 2023

Denise Soule Cassidy
Westbrook Junior College
December 27, 2021

Maureen Ann Rodden Elliot
Westbrook Junior College
December 3, 2022

Helen Rafferty Hartigan
Westbrook Junior College
February 12, 2018

Andrea Calef Rowell
Westbrook Junior College
May 4, 2019

1970

Deborah Hartford Rourke
Westbrook Junior College
October 11, 2023

1972

Helen Freeman Allerding
Westbrook College
September 6, 2022

Roland Jalbert
Saint Francis College
November 29, 2023

1973

Robert McCarthy
Saint Francis College
November 5, 2023

1974

Kenneth G. Messina
Saint Francis College
October 19, 2023

1975

Robert M. Marcil
Saint Francis College
January 22, 2018

1976

Noreen Trombly Laccheo
Westbrook College
February 13, 2024

1978

Nancy Roberts Barrows
Westbrook College
April 23, 2024

1980

Warren Youker
Westbrook College
December 15, 2023

1987

Margaret Howlett Hasty
Westbrook College
October 26, 2023

1989

Jean Atherton
Westbrook College
July 31, 2023

1990

Michael Harstein
University of New England
June 11, 2024

2002

Joan Lang
University of New England
November 20, 2023

Neil P. Scannell
University of New England
October 16, 2023

2003

Nancy B. Kuemmerle
University of New England
May 1, 2023

2008

Denise Stacy
University of New England
November 12, 2014

2013

Michael Brezak
University of New England
June 30, 2023

2017

Julia Knox
University of New England
November 7, 2023

2019

Taylor Gallant
University of New England
August 1, 2024

FRIENDS

Madeline G. Corson
April 29, 2024

Ronald Drouin
June 1, 2024

David Flood
January 11, 2024

Walter D. Goldfarb
October 13, 2021

Stephen K. Halpert
July 13, 2024

Harry W. Konkel
January 6, 2024

Robert E. McAfee
December 19, 2023

Michael A. Morel
August 20, 2023

Alvin Hamblen Morrison
April 2, 2024

Harold Osher
December 23, 2023

Robert Parenteau
July 10, 2024

James Pickett
January 3, 2024

Lucy Poulin
October 14, 2023

Robert F. Preti
November 10, 2023

Lois Reckitt
September 30, 2024

Eileen Litton Wyatt
September 10, 2023

REMEMBERING: STEPHEN K. HALPERT

by Amy Haile

Well-known Portland photography curator and owner of The Movies on Exchange, Stephen K. Halpert passed away on July 13, 2024. Halbert was a dedicated Westbrook Junior College and Westbrook College faculty member for more than 35 years.

During his tenure, which began in 1965, Halpert was an associate professor of English and the humanities and chair of the Department of Language and Literature.

Halpert's legacy included expanding the scope of cultural studies on campus. He designed several new courses exploring mid-to-late 20th century literature and drama, he initiated film study and creative writing on campus, and he continued a campus tradition by fostering the Blue Stocking creative writing competition. As a teacher, Halpert had a reputation for supporting his students and being there when they needed his help and so was made an Honorary Alumnus of Westbrook College in 2000.

As a member of the Richard F. Bond Enrichment Series Committee, Halpert helped to enrich the life of the campus with performances, lectures, and readings by such artists as writer Anaïs Nin, mime Tony Montanaro, the Portland String Quartet, and many local poets.

For decades, Halpert ran the photography gallery, where he built Westbrook College's outstanding permanent photography collection and curated photography exhibits at UNE. In 2016, his talent and dedication were recognized by the creation of UNE's Stephen K. Halpert Photography Collection, a gift from Leonard Lauder and Judy Glickman Lauder to expand UNE's photo collection.

Hilary Irons, UNE gallery and exhibitions director, said Halpert was a "powerful, dynamic force."

"Steve had an eye for socially oriented artwork, always looking for images that deepen our attention to the human condition, and his knack for collecting has formed the basis of an impressive archive of photographic work at UNE," Irons said. "Steve filled his time at the UNE Art Galleries with energy, excitement, and a constant wellspring of curiosity. He is greatly missed." ■

REMEMBERING: ROBERT E. MCAFEE, M.D.

by Amy Haile

Trustee Emeritus and dedicated advocate for health education Robert Elwood McAfee, M.D., left behind a profound legacy within the UNE community and beyond when he passed away on Dec. 16, 2023.

McAfee joined the UNE Board of Trustees in 1995, bringing with him an unwavering commitment to the University's growth and advancement. McAfee's vision and leadership were instrumental in shaping the future of UNE.

During his illustrious career in medicine, he served as an attending physician at Maine Medical Center for 31 years, as well as chief of surgery and vascular surgery at Mercy Hospital.

Among McAfee's most impactful contributions to medicine was his advocacy for the equal recognition of allopathic (M.D.) and osteopathic (D.O.) physicians. At a time when a D.O. was often perceived as less qualified, McAfee championed the recognition of the D.O. as equal within the medical community. His efforts helped establish UNE's College of Osteopathic Medicine as a significant force in Maine and the region's health care workforce.

> Bob's legacy of compassion, dedication, and service will forever be a part of the fabric of the University of New England.
>
> *— James Herbert*

Beyond his medical practice, McAfee was a prominent figure in various medical organizations and public health initiatives at the state and national levels and left a timeless stamp on the medical community. He earned the title of American Medical Association president in 1993 — the first and only physician from Maine to head the organization.

McAfee was also a fervent supporter of scholarships and educational programs, believing in the power of education to transform lives, said UNE President James Herbert.

"Bob's legacy of compassion, dedication, and service will forever be a part of the fabric of the University of New England," Herbert remarked. "His contributions to health care, education, and the community at large have left an enduring impact on UNE, and this legacy will continue to inspire future generations of health care professionals and students. He will be dearly missed." ■

AGILE MOMENTUM FOR UNE BUSINESS EDUCATION

by Emme Demmendaal

Tyler Richards loves business analytics. That's the simple truth.

At 16, he was working as an intern at Keller Williams Realty, where he explored his interest in real estate and investments. By 18 and a senior in high school, Richards' excitement to work in the industry pushed him to take the licensing exam and work as a real estate agent. And in the fall, he moved to Maine to pursue a business degree at the University of New England.

In the three years since Richards (Business Administration, '26) arrived on UNE's Biddeford Campus after leaving his home in Templeton, Massachusetts, he's seen UNE's business programs transform into a college humming with a vibrant, entrepreneurial community.

With a head for numbers and an enterprising spirit, Richards — now a junior at UNE — recently jumped at the chance to work with the University's two new business centers that launched this fall.

The centers — the Center for Sales Excellence and the Center for Sport and Business Innovation — were established to advance UNE's commitment to providing cutting-edge business education and prepare students for leadership roles in the evolving business landscape, including private entities, nonprofit organizations, professional sports organizations, and manufacturers.

"I have always had an interest in studying and diving deep into either the numbers or concepts behind certain areas of business," Richards said, adding that, as a linebacker for the UNE football team, he's excited to combine his love of sports and business analytics in future research and internships at the new centers.

The momentum in the College of Business will provide him with a wealth of new possibilities, allowing him to expand his knowledge across various fields of business and better define his career focus, he said.

"The centers have connections in place, and all you have to do is just explain what it is you want to achieve with your career, and they're going to set you down a path that's going to be able to help you," Richards said.

Norm O'Reilly, Ph.D., the inaugural dean of UNE's College of Business, explained that by combining practical experience, industry connections, and thought leadership, the new centers will create a hub for business innovation that will prepare UNE graduates for successful careers while also contributing to the broader business community in Maine.

"What makes UNE unique is our focus on experiential learning and our ability to create niche programs that meet industry needs," said O'Reilly, who can't wait to involve students in projects like sports fan satisfaction surveys and national sales competitions.

In addition to O'Reilly's multifaceted leadership in sports business and academia, he is a partner-consultant at The T1 Agency, a Toronto-based sports marketing agency that works with high-profile clients, such as Nike, UFC, and Pepsi.

The Center for Sales Excellence is led by Tom Morgan, CLS, a veteran sales executive. With Morgan's 25 years of experience with major brands like Reebok and PUMA, students will gain a competitive edge in the dynamic world of sales and merchandising.

"We want to bring real-life sales opportunities and situations to students, helping them become interested in these career paths," said Morgan.

The new Center for Sport and Business Innovation is led by Connor Blake, MBA. It aims to prepare students for impactful careers in the global sports industry through research, internships, and job placement.

Blake's research focus is on sports branding, with a particular emphasis on name, image, and likeness at the college level and its impacts on athletes.

"Everything that we're aiming to do in the center is student-focused, student-driven," said Blake, noting that the UNE College of Business plans to work backward from student interests, aligning research projects and industry partnerships with students' passions to ensure that the center's activities are relevant and engaging for business students.

Since its inception in 2023, the college has launched new degree programs in accounting, finance, marketing, and New England's first degree program in outdoor business and innovation. The establishment of these new centers and programs is designed to meet the needs of in-demand careers in Maine and the nation's growing business, technology, and outdoor recreation sectors, said Gwendolyn Mahon, UNE provost and senior vice president for Academic Affairs.

"These new academic programs reflect the University's commitment to meeting evolving industry standards and workforce needs while preparing students for the dynamic challenges and opportunities they will encounter in these fields," she said.

Working with Blake, Richards will gain more hands-on experience analyzing sports organizations' strategies and determining how allocating resources across various departments, like marketing, social media, and branding, impacts an organization.

Richards said that while it's only the start of the second year of UNE's newest college, he already anticipates gaining a competitive edge with the work he will do there this year.

"I can't wait to see how these centers will help me grow both personally and professionally," Richards said. ■

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