

# Empowering Transformation

**A grant from the Harold Alfond Foundation supports student success and retention**

IT'S A CHALLENGE as old as higher education itself: How can a university make sure that students who enroll are able to persist and succeed?

Most experts agree that a sense of support and opportunities for experiential learning are essential parts of the equation. The University of Maine's past efforts have included the Make the Grade program that offered a free re-do course to any first-year student who failed a class, and partnerships with local organizations that could provide internships. Each of these impacted the lives of some students, but university and University of Maine System leaders didn't just want to help some students succeed.

They wanted to transform the student experience for each and every student. The challenge is that transformation requires a long-term, coordinated effort, as well as funding.

## **An Unprecedented Gift**

In October 2020, in the midst of pandemic lockdowns and challenges, the University of Maine System received an almost unprecedented gift — a \$240 million dollar grant from the Harold Alfond Foundation. Of that investment, \$20 million was earmarked for a suite of student success and retention programs.

Dubbed UMS TRANSFORMS Student Success & Retention Initiative, those programs are already taking shape and producing results across the University of Maine System.

They are:

- Research Learning Experiences for first and second-year undergraduate students
- Gateways to Success that expand learning assistance in introductory courses
  - Pathways to Careers that connect students with credit-bearing internships and experiential learning opportunities

"There is nothing in TRANSFORMS SSR that is completely new to higher education. Many universities have components of each of our initiatives, and we know that they work for a wide variety of students. The combination of these proven practices, however, and ensuring they are available to all students, not just upperclassmen or the privileged



few, that is the real innovation here," said Brian Olsen, executive director of the TRANSFORMS SSR activities.

### Success Begets Success

The University of Maine and its regional campus, the University of Maine at Machias, led the way and were the testing grounds for the trial Research Learning Experiences (RLE). Faculty and staff created RLEs, and the rollout was swift. Planning started in early 2021, just a few months after the award was announced. By that time, instructors already had class schedules for the semester. That didn't stop them from putting forth proposals for RLEs they could implement in their classes.

Beginning the following academic year, in 2021-2022, 10 percent of incoming first-year students at UMaine participated in RLEs. The program was so successful that organizers skipped the second planned pilot year and rolled it out across five more universities for year two.

"People just really came together. It was both top down and bottom up. That first year was really successful and success begets success," said John Volin, executive vice president for academic affairs and provost.

By the start of the 2023-2024 school year, participation at UMaine was up to 30 percent and a majority of the University of Maine at Farmington's first-year students were participating. Across the University of Maine System, more than 900 students were enrolled in an RLE.

### Bridge Experiences

The research opportunities for students participating in RLEs span a broad range of disciplines. For students who already know their major, there are opportunities in marine biology, education, art, biochemistry, and other subjects. Students who haven't yet decided on a major also have an array of RLE options to explore.

Since the introduction of RLEs, business, nursing, and performing arts programs have all made the experiences mandatory. Other programs offer RLEs, but don't require them.

Each RLE begins with a bridge experience, which starts in late summer, the week before regu-

lar classes begin. These intensive orientation and learning opportunities can be a general experience or a focused deep-dive.

Jason Bolton '06, '08G, '12 Ph.D., associate dean of UMaine Cooperative Extension and area coordinator of the Innovation Program, was among the pilot group to offer a generalized bridge week at UMaine. The goal: to get students comfortable with each other, student research, and their place at the university.

During Bolton's bridge week, students spent mornings learning about research, the challenges and opportunities of college, understanding networks, and the support available on campus. Group leisure and team-building activities filled the afternoons.

When asked about their concerns for the school year, a pattern emerged among the students, who had just arrived on campus to begin their college careers. "The thing that came up over and over again was not having a friend network, a community network," Bolton said.

So in the second year, Bolton added more community building. He brought students to the 4H Extension camps at Bryant Pond and Blueberry Cove, where they worked on team building and group problem solving.

By year three, Bolton felt like they'd really found their stride. Students were prepared for their RLE but also had a network of classmates, professors, and staff to call on if they felt stuck.

"I still see them cruising around campus months later in some of the same groups," Bolton says.

### Subject-Specific Opportunities

Associate Professor of Genomics Sally Dixon Molloy '07 Ph.D. partnered with Edward Bernard '07, '12 Ph.D., vice chair, co-graduate and undergraduate program coordinator and senior lecturer of microbiology to offer a more subject-specific bridge week to prepare students for her SEA-PHAGES program, a year-long research course designed to give first-year students authentic research experiences in bacteriophage biology.

The centerpiece of the experience is the opportunity to take isolates from pathogenic bacteria and



Brian Olsen is the executive director of UMS TRANSFORMS Student Success & Retention Initiatives and professor of ornithology.



Sally Dixon Molloy engages first-year students in a year-long course that enables them to see the results of their research and lab work.

"College is a life-changing experience, and the more a student is involved in that process the more effective it becomes. This new opportunity ... transforms our students into producers of knowledge and not just consumers, starting in their very first semester." John Volin

"The idea that we would have this kind of an investment in the University of Maine System and in particular in the University of Maine — it's transformative, it's a chance to do so many things that matter for all of us and for our students." *Joan Ferrini-Mundy*

sequence the genomes. In the spring semester, those bacteria sequences come back to the lab and the students analyze them.

"What's exciting is the viruses they're isolating in class. Some are used for phage therapy successfully to treat patients with drug resistant infections," Molloy said. "Students are just so excited to do some real science."

Along the way students learn research skills, hear from alumni, and get to know their professors. They're oriented to campus resources and hear about the projects that faculty are working on. They also get access to a peer mentor program where they can build connections and gain extra credit.

#### Gateways and Pathways

While the RLEs have brought positive results for participating students, other components of the Alford grant are further strengthening student retention and success.

By the 2022-2023 school year, the Gateways to Success initiative was in place across all seven campuses of the University of Maine System. It trained upperclassmen as Maine Learning Assistants (MLAs) or other types of peer-embedded support who were placed in introductory courses to facilitate learning. It also created an early alert system that would flag students who were having difficulty. The program enabled instructors and MLAs to intervene and set up greater options in online tutoring, where struggling students were matched one on one with peers from their university who have been successful in the course in the past.

That initial wave of proposals focused on the course level with professors suggesting what they thought would be helpful for their classes. The next round of proposals is going to support students in gateway courses more broadly.

Pathways to Careers is the newest of the three initiatives and is still in the developmental stage. The goal is to increase awareness of and access to career-relevant opportunities for students, especially in the form of paid internships. Most commonly, such experiences go to students who know about them, and already have contacts. That's about to change.

The initiative will develop a one-stop shop

for experiential learning opportunities, shared across the entire University of Maine System. The first step is to build a portal site that is easily accessible to all students. The majority of UMS campuses are also currently planning pre-internship training programs that will launch this spring. These activities will help connect students with internships and help them get the most out of those experiences when they occur.

Through funds provided by the Maine Jobs and Recovery Plan, Pathways to Careers has also established a grant for any UMS student, so that the often-ignored costs of participating in an internship — buying professional attire, mileage, remote housing, childcare, a laptop — won't be barriers to the students.

"We know that internships and other similar career-relevant positions can spell the difference between getting a good job or not after graduation. And we also know that it isn't random which students do not get the chance to participate in these life-changing experiences. Pathways to Careers is going to change that," says Olsen. The hope is that alumni and professional donations to UMS TRANSFORMS will help keep these student supports running after the Recovery Plan funds are gone.

#### Promising Preliminary Results

Measuring the results of all these initiatives will take time. Volin points out that many of the metrics used to measure student success are lagging indicators. Retention, for example, is often based on six-year graduation rates.

"You're not going to expect a huge change overnight. It will take years to fully understand the impact," Volin said.

However, surveys are already highlighting the value of these efforts. Preliminary data indicate that 63 percent of the RLE students feel supported by their peers versus about 48 percent of non-RLE students. Students in RLEs come out of their first semester with a strong sense of belonging and community, an ability to reflect on and use what they are learning, and a research mindset.

"I really do think this will have a significant impact on overall student wellbeing, not just during their undergraduate years, but after they graduate," Volin said. **M**



Jason Bolton adjusted his RLE to improve the student experience and strengthen their support network.