

MAINE ECONOMIC IMPROVEMENT FUND FISCAL YEAR 2025 IMPACT REPORT



FY25 brought both unprecedented momentum and headwinds for University of Maine System research and development (R&D). During this year, the Maine Economic Improvement Fund (MEIF) was essential to our ability to deliver the talent and innovation necessary to continue to grow the state's economy and competitiveness.



Through MEIF, the Legislature supports System R&D with commercial promise and statewide relevance and impact, ensuring Maine's public universities have the basic infrastructure and investment needed to obtain matching funds and merit-based grants.

Led by the world-class University of Maine, the state's only institution to have achieved R1 Carnegie Classification, our ongoing MEIF appropriation is leveraged at an extraordinary rate. In FY25, UMS delivered a more than 7:1 return on every MEIF dollar — directly supporting student, faculty, staff, and student research and partnerships across Maine's seven strategic sectors.

Amid a dynamic and rapidly evolving federal funding environment, MEIF was foundational to us achieving record research success and impact in FY25. While tens of millions of dollars in our existing federal grants and contracts remained terminated or paused as of June 30, 2025, Maine's public universities continued to compete for new R&D funding, win, and deliver impact.

In fact, the amount of external funding secured by the System for our state this fiscal year surpassed \$283 million, with a historic high of \$243.6 million at UMaine. These results reflect the quality and relevance of our research and our willingness and ability to adapt our activities to align with emerging state and national opportunities, made possible by the stability of MEIF.

The impact on these investments across our state is extraordinary. By supporting modern laboratories, specialized expertise, and research learning experiences that prepare our graduates for in-demand careers, MEIF advances new discoveries and allows Maine businesses to access a knowledgeable workforce and cutting-edge facilities, accelerate product development, reduce risk, and reach markets faster than they could on their own.

Our outcomes are especially significant given Maine's longstanding underinvestment in R&D. At just 1.4% of GDP, Maine's overall R&D spending remains well below the national (4.1%) and New England (6.3%) averages, which puts our economy at a competitive disadvantage. A new State statutory goal to reach the U.S. average by 2030 sends a clear signal to the world that innovation matters in Maine. That will require growing funding from flexible sources like MEIF that allow seed funding, attract co-investment, and respond to real economic needs. Please think of UMaine as the state's R&D Department and our public universities as your partner in achieving that goal and promoting prosperity for all Maine people.

We are grateful for the continued support of the Legislature, Governor Mills and State agencies, Maine's Congressional Delegation, and our many private sector and community partners. Together, we are proving that sustained research investment, like that of MEIF, strengthens Maine's economy and workforce, expands opportunity, and positions our state as a leading source of innovative solutions in an increasingly competitive and changing world.

Dannel P. Malloy
Chancellor, University of
Maine System

Joan Ferrini-Mundy
Vice Chancellor for Research &
Innovation, University of Maine System
President, University of Maine and
University of Maine at Machias

Our goals:

Generate co-investment

For every **\$1 from MEIF**, UMS leveraged a **record \$7.3 in co-investment** for projects in the seven strategic sectors in FY25.

Expand economic partnerships

Led by UMaine, UMS leveraged MEIF to **directly partner with 378 Maine companies** in FY25 to strengthen the economy statewide.

Grow Maine's skilled workforce

MEIF directly **supported 1,453 UMS students** participating in hands-on, research learning in FY25, generating real-world solutions and preparing them for success in high-demand careers.

Leveraging MEIF to Strengthen Statewide University Research Infrastructure and Impact

As part of a System commitment to building research opportunities, capacity, and impact statewide, a portion of MEIF funding is directed to small UMS universities through an annual internal competition. Seed funding provided through MEIF supported a University of Maine at Augusta project, Smart Manufacturing: *Securing Maine's Factories of the Future*, leading to a \$200,000 competitive federal award to launch new training pathways in partnership with the Maine National Guard, Greater Augusta Utility District, Tyler Technologies, and local community colleges. The two-year initiative will strengthen Maine's cybersecurity workforce and protect critical public infrastructure by training up to 60 participants through microcredentials, apprenticeships, and boot camps.

Other FY25 MEIF-supported small campus research included:

- *A Machine-Learning Based Diagnostic Tool for Detecting Breast and Prostate Cancers* (University of Maine at Presque Isle)
- *Building Collaborative Wood Quality Research Capacity* (University of Maine Fort Kent)
- *Filter-Feeding Bivalves and Their Role in Soft-Shell Clam Recruitment: A Comprehensive Study in Maine's Coastal Waters* (University of Maine at Machias)
- *Remote Monitoring of Maine's Snowpack to Determine Infrastructure, Recreation, and Ecological Impacts of Changing Winter* (University of Maine at Farmington)

Success Stories from Maine's R&D Department



Mechanical engineering researchers at UMaine are innovating new technology to improve seniors' safety and support independent living.

A team of Black Bear researchers has developed a small wearable device that uses rhythmic haptic feedback to encourage arm movement, which in turn improves gait, balance, and mobility. With its low cost and user-friendly design, the device shows promise for broader at-home use and integration into rehabilitation practices, extending the benefit beyond Maine to aging communities everywhere.



Specialized UMaine facilities and expertise is helping the Portland-based SalmoGen Company, Inc. significantly accelerate its timeline to market.

"These fish are the foundation of our breeding program and essential to the future of our company. Housing them at the UMaine Center for Cooperative Aquaculture Research, under the care of their expert staff, enables us to rapidly scale up our biological assets while our own Maine facility is designed and constructed," said General Manager Nick King. "This partnership accelerates our timeline to market by four years, meaning that we expect to begin operations and hiring much sooner, bringing new employment opportunities and economic benefits to the local community."



UMaine is partnering with the VA Maine Healthcare System to expand healthcare services, advance medical research, and improve clinical education, directly benefiting Mainers — especially Veterans — by addressing key health challenges such as rural access, aging, mental health, and chronic disease. By combining UMaine's research expertise with VA Maine's clinical reach, the collaboration is launching mobile health clinics, telemedicine, and workforce training. "Together, we can improve the quality of care for eligible Maine veterans and make a broader impact on the health of communities throughout the state," said Medical Center Director Tracye Davis.



As part of its efforts to strengthen the state's struggling dairy industry, UMaine has introduced a new advanced robotic milking system at its animal science research farm in Old Town. The technology allows cows to set their own milking schedule, increasing production and herd health while reducing labor demands. Since 1994, the number of dairy farms in Maine has declined 75%, in part due to workforce shortages and production costs. With the modernization of Witter Farm, UMaine is preparing students for rewarding careers in agriculture and helping to de-risk and research the integration of new milking technologies to improve industry profitability.

MEIF-Funded UMS Student Interns Support Startups Through Maine Regulatory Training and Ethics Center

The MEIF-supported Maine Regulatory Training and Ethics Center (MeRTEC) at the University of Southern Maine helps small businesses navigate complex regulatory requirements by pairing them with student interns. In FY25, MeRTEC supported Mar Mar, a Portland-based food startup producing kelp-based noodles from Downeast-harvested seaweed, by connecting founder Elizabeth Kennedy with University of

Maine School of Law interns who provided guidance on key regulatory and operational issues, including DBA best practices, food manufacturing compliance, and intellectual property protection. With this technical assistance, Mar Mar launched its first product in 2025, contributing to the growth of Maine's blue economy.