

Advancing Human Health and Wellbeing in Maine and Beyond



Kody Varahramyan Vice President for Research and Dean of the Graduate School



David Harder
Director of the Institute of Medicine



What is our Vision?

To enhance health related research and delivery through partnerships between university campuses, research institutions and healthcare systems within Maine and beyond.

What is our Mission?

To develop through innovative and coordinated research, education, and strategic partnerships transformative solutions that enhance the health and wellbeing of the citizens of Maine and beyond.

What are our Goals?

To advance medicine and healthcare in Maine and beyond.

To elevate the University's prominence in health and life sciences.

To develop a national model for rural medicine and healthcare.

To enable attainment of external resources to support the

Institute's mission goals.





Our Institute Team

David Harder, PhD

Director Institute of Medicine

Tanya Pinkham, EdD

Assistant Director for Development and
Administration



Cecile Ferguson
Program Manager





Who are on our Leadership Team?

David Harder, PhD

Director Institute of Medicine

Caitlin Howell, PhD

Associate Professor of Bioengineering

Alan Cobo-Lewis, PhD



Associate Professor of Psychology, Director of the Center for Community Inclusion and Disability Studies

Sandra De Urioste-Stone

Associate Professor of Nature-based Tourism, Assistant Vice President for Research

Jeffrey Hecker, PhD



Professor of Psychology, Director of Clinical Training, College of Liberal Arts and Sciences

Melody Neely, PhD

Associate Professor and Chair of Molecular and Biomedical Sciences, College of Earth, Life, and Health Sciences

Shihfen Tu, PhD



Professor of Education and Applied Quantitative Methods, School of Learning and Teaching, College of Education and Human Development

Gregory Cox, PhD

Associate Professor of Biomedical Sciences, Director of the Graduate School of Biomedical Science and Engineering











What is the role of our Leadership team?

- Collaborate on issues related to IOM, the university and external partnerships
- Represent the colleges that IOM works with
- Provide input to the mission of the college and interaction with IOM
- Function as ambassadors for the IOM and its programs
- Act as liaisons to faculty



Who are our External Advisory Committee Members?

• Brad Schimelman, MD

Associate Chief of Staff for Education and Research at VA
 Maine Healthcare System

Cliff Singer, MD, DFAPA, AGSF

- Chief, Center for Geriatric Cognitive and Mental Health Director, Mood and Memory Clinic
- Director, Robert C. Strauss Neurocognitive Research Program
 Chair, Northern Light Eastern Maine Medical Center Research
 IRB, Northern Light Acadia Hospital

• Douglas Sawyer, MD

- Chief Academic Officer, Maine Medical Center and Maine Health
- Co-Director, Myocardial Biology and Heart Failure Laboratory,
 Maine Medical Center Research Institute









Who are our External Advisory Committee Members?

• Hermann Haller, MD

- President, Professor, MDI Biological Laboratory
- Professor, Director, Department of Nephrology and Hypertension, Hannover Medical School



James W. Jarvis, MD, FAAFP

- Director of Clinical Education, Eastern Maine Medical Center
- Senior Physician Executive, System Incident Command, Northern Light Health



• Karen L. Houseknecht, PhD

 Professor & Associate Provost for Research and Scholarship at the University of New England





Who are our External Advisory Committee Members?

- Lisa Guay-Woodford, MD
 - Professor of Pediatrics, University of Pennsylvania
 - Senior Advisor for Clinical and Translational Research Initiatives
 - Presidential Scholar Endowed Chair for Clinical and Translational Science
 - Children's Hospital of Philadelphia
- Mary Prybylo, RN, MSN, FACHE
 - Covenant Health Senior Vice President
 - President at St. Joseph Healthcare







Who are our External Advisory Committee Members?

- Nadia Rosenthal, PhD, FMedSci, FAAHMS
 - Scientific Director and Professor, the Jackson Laboratory for Mammalian Genetics



- Raimond Winslow, PhD
 - Director of Life Science and Medicine Research
 - Professor of Bioengineering at the Roux Institute





What is the role of our EAC members?

- Advise IoM and the university on how to collaborate and integrate effectively
- Act as ambassadors to IoM and their respective institutions
- Develop research collaborations between UMaine faculty, their respective institutions, clinical research centers, outreach and education programs
- Develop and support integrated research symposium with UMaine – IoM
- Liaisons between the UMaine and community at large



Who are our partner institutions?





INNOVATION FOR A HEALTHIER PLANET







PORTLAND • GORHAM • LEWISTON • ONLINE









Who are our partner institutions?

















2024 Second Maine Research Symposium on Biomedical Science and Engineering

- March 27 & 28
- Wells Conference Center
 - Oncology and Translational Medicine
 - Panel discussion on clinical research and workforce development
 - Focus on public health
 - AI Applications in Medicine
 - Cellular Mechanisms Associated with Disease States
 - The 18th Annual University of Maine Clinical Geriatrics Colloquium
 - The Maine Rural Graduate Medical Education (MERGE) Collaborative's first Rural GME Conference
 - Student poster session and awards







Symposium Collaborating Organizations

The Center on Aging – 18th
 Annual Clinical Geriatrics
 Colloquium



• The MERGE Collaborative





How do we achieve our mission?

The Institute of Medicine, Leadership and EAC teams strive to:

- Enhance biomedical/healthcare research and education within UMS and beyond
- Develop and nurture collaborations with Maine's healthcare and research institutions
- Increase funding opportunities with federal agencies
- Seek solutions and alternatives for the health and wellbeing of Maine's aging population
- Make university resources available to the community (i.e., science cafés)
- Develop solutions for healthcare access, mental health research, and provider outreach in rural settings (in coordination with Maine Public Health Association)



Working effectively with faculty

- Faculty affiliations
- Seed funding
- Equipment funding
- Summer fellowship funding
- Mentoring
- Grant submissions
- Development of joint research agreements (i.e., VA, MDIBL, JAX and the Roux Institute)
- Access to EAC partner institutions
- To link physician scientist with faculty when required for grants, etc.
- Microbe and Social Equity spring series, summer symposium
- Distinguished lecture series:
 - Past lectures: <u>Alan Butterfield</u>, Clifford Rosen, <u>Jeffrey Hecker</u> and Clifford Singer
- To work closely with GSBSE



Working with students

• Financial:

- Fellowships
- Internships
- Seed funding faculty/ budget for student workers

• Events:

- Poster sessions, awards
- Networking at symposiums (i.e., Zebrafish
 Symposium talks, posters, presentations)
- Work with graduate students (GSBSE)



How do we engage with external partners?

• Development and execution of MOUs:

- Northern Light Health
- University of Southern Maine
- Veterans Affairs Office
- The Roux Institute

• Increase research awareness:

- Identify potential partnerships
- Potential access to additional research databases
- Enhanced research funding
- Joint appointments



How do we engage with the University of Maine system?

IoM Events:

- Distinguished lectures
- Seminars and symposiums
- Engage UMaine faculty with external partners
- USM MOU with IoM and UMaine

• IoM Partnerships:

- BioScience Day
- MDIBL Maine Biological and Medical Sciences Symposium (MBMSS)
- Northern Light Research Day
- Roux Life Science Day
- Symposia
- Affiliated faculty positions with USM



Supporting R1

- Provide administrative support to the COBRE
- IoM staff works with TASC to provide administrative support to the COBRE director and project leaders. Tasks include:
 - Attend the 9th National IDeA Symposium of Biomedical Research Excellence (<u>NISBRE</u>), June 16-19, 2024, Washington Hilton, Washington DC.
 - Plan the annual retreat for COBRE director, project leaders, CORE staff, steering committee, mentoring committee, and external advisory board.
 - Working with faculty from the Cooperative Extension and One Health Initiative.



Centers supported by IoM

- Center on Aging
 - To develop a biology of aging program with the COA in conjunction with partnering divisions at UMaine, Jackson Laboratory, Acadia Hospital, and VA Maine.
- Center for Community
 Inclusion and Disability
 Studies





University Center for Excellence in Developmental Disabilities

COBRE





How do we interact with the community?

- Annual Distinguished Lectures
- Seminar Series
- Development of Science Cafés
 - By raising awareness of research being conducted by faculty, students and industry
- Dr. Harder joined the Board of Trustees with Maine Public Health Association
- Dr. Pinkham was appointed to the Northern Light Health Institutional Review Board



Interested in becoming an affiliate faculty?

- Visit the Research Center and Institute Faculty

 Appointment page for more information on:
 - Research Center Faculty Appointment Guide
 - Joint Appointment MOU Template
 - Research Professor MOU Template
 - Associate MOU Template
 - External Associate MOU Template