IMPACT 2025: The Medical School’s Strategic Roadmap

2023 Annual Progress Report
UMass Chan: by the numbers

3 Schools
- T.H. Chan School of Medicine
  663 LEARNERS
- Tan Chingfen Graduate School of Nursing
  249 LEARNERS
- Morningside Graduate School of Biomedical Sciences
  350 LEARNERS

$1B IN ANNUAL REVENUES

$300M RESEARCH RECEIVES MORE NIH FUNDING THAN 26 ENTIRE U.S. STATES

Top 10 FOR PRIMARY CARE EDUCATION

Annual Economic Impact 5,600+ EMPLOYEES

$1.8B

Top Employer IN MASSACHUSETTS
IMPACT 2025: Our strategic roadmap
IMPACT 2025

Our first 50 years validated our purpose.

The next 50 will demonstrate our contributions as a leading-edge medical school known for propagating an enhanced social mission.
Our Mission

To **advance** the **health and wellness** of our **diverse communities** throughout Massachusetts and across the world by leading and innovating in **education**, **research**, **health care delivery** and **public service**.
Our Strategic Pillars

EDUCATION

BASIC SCIENCE

TRANSLATIONAL RESEARCH

COMMUNITY AND GLOBAL IMPACT

OPERATIONAL EXCELLENCE AND FINANCIAL STEWARDSHIP

DIVERSITY, EQUITY AND INCLUSION
Education

Workgroup Chair: **Anne Larkin, MD**
Strategic Priority Areas

Education

• Design innovative educational programming
• Prioritize wellness
• Facilitate interprofessional learning

• Promote a diverse and inclusive environment
• Respond to workforce needs and trends
• Invest in next generation pedagogy and educators
Accomplishments To Date

Education

• Securing LCME & NECHE Accreditations
• Rolling-out of Vista Curriculum
• Expanding DRIVE Initiative
• Launching new and enhanced educational pathways
• Investing in wellness support
• Nurturing a diverse, welcoming and supportive learning environment
Looking Ahead

Education

- Launching new dual degree programs
- Completing GME strategic planning
- Investing in state-of-the-art educational spaces and technology
- Expanding class size to respond to workforce needs
- Developing and strengthening clinical affiliations
Strategic Academic Affiliations

Major Clinical Affiliates throughout the state

- Berkshire Medical Center
- UMass Memorial Health
- Milford Regional Medical Center
- Baystate Health
- Saint Vincent Hospital
- Cape Cod Healthcare
- Beth Israel Lahey Health
Regional Campuses

UMass Chan–Baystate
- Founded in 2015
- 25 students per year
- Special PURCH curriculum track focused on urban and rural community health

UMass Chan–Lahey
- Pending LCME approval
- Master affiliation agreement signed
- Special curriculum track focused on leadership, health systems science and interprofessional education
Basic Science

Workgroup Chair: Terry Flotte, MD
Strategic Priority Areas

Basic Science

• Build research expertise in human genetics
• Invest in emergent opportunities
• Promote team and transdisciplinary science
• Support the engine of discovery
Nobel Prize-winning biomedical research enterprise attracts more than $300 million in funding annually.
Major Research Focus Areas

- Gene therapy and RNAi
- Neuroscience
- Inflammation and Immunity
- Digital Medicine
- Health Equity (in Clinical and Translational portfolio)
Programs to be housed in NERB and Backfill

- Horae Gene Therapy Center
- Neurobiology
- Neurology/Neurosurgery/Wellstone Program
- Program in Molecular Medicine
- Program in Human Genetics and Evolutionary Biology (NEW)
Translational Research

Workgroup Chair: **Katherine Luzuriaga, MD**
Strategic Priority Areas

Translational Research

- Accelerate translational research
- Launch an integrated biomarker core
- Emphasize the data sciences
- Invest in translational research talent
Accomplishments To Date

Translational Research

- Leading COVID-19 clinical trials
- Launching Translational Institute for Molecular Therapeutics
- Transforming IBD/BRIDGE IP and external partnering platforms
- Developing Program in Digital Medicine
- Revamping Research Informatics Core
- Investing in Platform for Learning Health
- Supporting and developing physician-scientists
COVID Clinical Trials: 2020 - 2023

- 47 Protocols
- 3 Pending Protocols
- 79% Therapeutic/Vaccine Trials
- 2,498 Study Participants
- 19 Principal Investigators
The Center for Advancing Point of Care Technology (CAPCat)

EUA’s: Maxim, Mesa, Quanterix, Microgem

Innovative mHealth methods supported POC testing in real-life settings: Serial rapid Ag tests on par with PCR


Academic partners: JHU, Northwestern, U Illinois, Emory

The Conversation, New York Times, Wall Street Journal
KL2 Scholars 2022

Nisha Fahey, DO
Department of Pediatrics; Population and Quantitative Health Sciences
Mentors: Jeroan Allison, MD, MS; Arvin Garg, MD, MPH
Project Title: Enabling Community-Based Kangaroo Care to Mitigate Health Inequities Among Preterm Infants

Laurel O’Connor, MD
Department of Emergency Medicine
Mentor: Edwin Boudreaux, MD
Project Title: A mobile Integrated Health Intervention for the Management of Acute-Phase Exacerbation of Congestive Health Failure and Chronic Obstructive Pulmonary Disease

Lara Kovell, MD
Department of Medicine, Division of Cardiology
Mentor: David McManus, MD, ScM
Project Title: Development of a Mobile Health Intervention for Blood Pressure Management in Pregnancy

Martha Zimmermann, PhD
Department of Psychiatry
Mentor: Nancy Byatt, DO, MBA, MS, DFAPA, FACLP
Project Title: Developing a Scalable Intervention to Prevent Perinatal Anxiety in Obstetric Settings
UMass CCTS K Award Writing Group

Information and feedback on academic career development and on preparing a Research Career Award application (e.g., NIH K, VA Research Career, CTSA KL2)

Success rate > 80%

Lisa Chasen-Taber, ScD
Professor, Public Health
UMass Amherst

Nancy Byatt, DO, MBA
Professor, Psychiatry
UMass Chan
KL2 Alum

Kate Pivovarova, PhD
Assistant Professor, Family Medicine
UMass Chan
KL2 Alum
UMass CCTS Pilot Awardees: 2022

Reducing Infections in Post-Surgical Events (RISE)

Adrian H. Zai, MD, PhD, MPH, PQHS
Kimiyoshi Kobayashi, MD, MBA, UMMHC
Richard T. Ellison, III, MD, Medicine
Robert C. Steppacher, Jr., MD Anesthesiology

Defining the Metagenome of the Urinary Microbiome Among Older Adults Residing in Nursing Homes

Evan Bradley, MD, PhD, Emergency Medicine
John P. Haran, MD, PhD, Emergency Medicine
Vanni Bucci, PhD, MAPS

mRNA Encoded Monoclonal Antibody for Therapeutic Use against Gonorrhea

Lisa A. Lewis, PhD, Medicine
Li Li, PhD, RNA Therapeutics
Sanjay Ram, MBBS, Medicine

Comparative Effectiveness of in Jail Therapeutic Community Treatment to Extended-Release Naltrexone on Longitudinal Health and Legal Outcomes

Ekaterina Pivovarova, PhD, Psychiatry
Bruce Barton, PhD, PQHS
Peter Friedmann, MD, MPH, Baystate
5th Annual PACE Awards: 2022
- UMass CCTS funded one of two awards ($170,000).

6th Annual PACE Awards
- RFA: February 2023
- CO-sponsored by UMMMG and UMass CCTS
- Collaborating on scientific review and funding
- UMMMG $200K + UMass CCTS $200K
Integrated Biomarkers Core

• Olink proteomics analysis of human fluids
• Spatial transcriptomics in human tissues using Multiplexed error-robust fluorescence in situ hybridization (merFISH) – SCOPE Core
• Developing capabilities in live tissue sectioning through Compresstome and culture for human tissue assays
Looking Ahead

Translational Research

• Leveraging best-in-class external partnership and commercialization infrastructure
• Supporting and investing in physician-scientists

• Pursuing NCI Cancer Center Designation
• Expanding clinical trial activity
• Strengthening data analytics
• Incorporating clinical affiliates into the UMass Chan research ecosystem
Community and Global Impact

Workgroup Chair: Jeroan Allison, MD, MSci
Community and Global Impact

- Enhance and empower partnerships
- Establish a Collaborative in Health Equity
- Anchor regional and state-wide public health priorities
- Enhance social mission
Accomplishments To Date

Community and Global Impact

• Developing an operational plan for the Collaborative in Health Equity (CHE) and hiring inaugural executive director
• Spearheading the UMass Chan Cares Initiative
• Opening best-in-class VA CBOC
• Standing up the UMass Chan Vaccine Corps and other COVID response initiatives
• Launching a new, enterprise-wide Volunteer Policy
The Collaborative in Health Equity will coalesce, energize, and enhance the many instances of excellence in research and service in the community-engaged and global health domains, including strategic investments.

A year-long planning process with 20 individuals from UMass Chan, UMass Memorial Health, UMass Chan-Baystate, and the VA established a solid foundation and guidance document for moving from concept to reality.
• Crista Johnson-Agbakwu, MD, has been appointed the **inaugural executive director of the new Collaborative in Health Equity.**

• Dr. Johnson-Agbakwu is uniquely positioned for this important and highly visible role.

• She is a thought leader on global health issues such as refugee women’s health, gender-based violence and female genital mutilation/cutting.
Looking Ahead

Community and Global Impact

• Nurturing a broader and deeper working partnership with external stakeholders

• Finalizing the organizational structure for CHE

• Defining and implementing a new social mission metrics framework

• Developing central database to track/evaluate health equity and community-engaged research efforts
Operational Impact & Financial Stewardship

Workgroup Chair: John Lindstedt
Strategic Priority Areas

Operational Impact & Financial Stewardship

• Become an employer of choice for an exceptional and diverse workforce

• Modernize and transform campus infrastructure

• Enhance and expand philanthropic and industry partnerships

• Provide innovative enterprise-wide technology solutions

• Leverage and connect strategic business units
Accomplishments To Date

Operational Impact & Financial Stewardship

- Recruiting new executive leadership to oversee HR and Facilities Management operations
- Implementing new budgeting processes to meet financial targets
- Modernizing IT infrastructure
- Completing the VA CBOC while concurrently designing NERB
- Launching new brand identity for Commonwealth Medicine: forHealth Consulting at UMass Chan Medical School
Worcester’s UMass Chan Medical School makes Boston Globe’s ‘Top Places to Work’ in 2022

Published: Dec. 01, 2022, 12:27 p.m.

By Ryan Mancini | RMancini@masslive.com

A part of Worcester was recognized in The Boston Globe Magazine on Sunday as UMass Chan Medical School was named among the 2022 “Top Places to Work in Massachusetts.”

It was the first time the institution made the annual list.

UMass Chan’s placement on the list made it the only higher education institution to be included out of the 150
The Expanding Campus Footprint

UMass Chan research buildings

VA Community-Based Outpatient Clinic
VA Community-based Outpatient Clinic
Looking Ahead

Operational Impact & Financial Stewardship

- Transitioning to performance-based pay model
- Investing in enterprise-wide data analytics to facilitate decision-making
- Finalizing a future strategy for MassBiologics
- Moving to Public Phase of New Pathways of Promise Campaign
- Leveraging the Morningside Foundation Endowment proceeds in future years
Diversity, Equity and Inclusion

Workgroup Chair: Marlina Duncan, EdD
Strategic Priority Areas

Diversity, Equity and Inclusion

- **Culture & Climate** - implement DEI policies/processes
- **Curriculum** - integrate anti-racist and inclusive curriculum and pedagogy
- **Education & Engagement** - increase DEI education, engagement and capacity.
- **Recruitment, Retention and Advancement** - recruit, retain and advance underrepresented and marginalized individuals
- **Accountability** - create an accountability framework for assessing DEI initiatives
Accomplishments To Date

Diversity, Equity and Inclusion

• Creating new Diversity Statement and enterprise-wide DEI policy
• Expanding breadth and depth of DEI training
• Investing in DIO leadership and content expertise
• Launching internal/external URIM networks and resource groups
• Piloting Diversity & Equity Actions Plans
UMass Chan Receives External Recognition for DEI
Looking Ahead

Diversity, Equity and Inclusion

- Launching 2023 Diversity Engagement Survey and analyzing results
- Rolling out department level Diversity Equity Actions Plans across the enterprise
- Broadening Restorative Justice training
- Creating a database to standardize, digitize and analyze DEI data to inform practice
Thank you!

Questions or comments may be directed to strategicplanning@umassmed.edu