

IMPACT 2025:

The Medical School's Strategic Roadmap

2023 Annual Progress Report



MARCH 2023

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

Graduate Medical Education

619 RESIDENTS/FELLOWS

\$1B

IN ANNUAL REVENUES

\$300M

RESEARCH

RECEIVES MORE NIH FUNDING THAN

26

ENTIRE U.S. STATES

#3

RANKING IN LICENSING REVENUE AMONG U.S. UNIVERSITIES



Top 10

FOR PRIMARY CARE EDUCATION

Top employer

IN MASSACHUSETTS

5,600+

EMPLOYEES

\$1.8B

ANNUAL ECONOMIC IMPACT

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.**



Advance practice, learning and leading by engaging fully with our communities to be the destination of choice for learners interested in interprofessional, team-based care and biomedical entrepreneurship



Enable the engine of discovery to generate groundbreaking scientific knowledge, with continued focus on areas of world-class strength



Enhance innovation and increase impact by advancing the science of translation and channeling more discoveries into development and practice



Measurably improve the health and welfare of the residents of Massachusetts and the citizens of the world by investing in an enhanced social mission that engages community partners, advances health equity research and promotes public health interventions for the benefit of those greatest in need



Establish models for outstanding support services, vibrant working environments and highly efficient infrastructure to propel UMass Chan to new heights



Create more inclusive, equitable environments across the entirety of the medical school so that UMass Chan can better attract, support and advance diverse staff, faculty and learners

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**.



Advance practice, learning and leading by engaging fully with our communities to be the destination of choice for learners interested in interprofessional, team-based care and biomedical entrepreneurship



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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



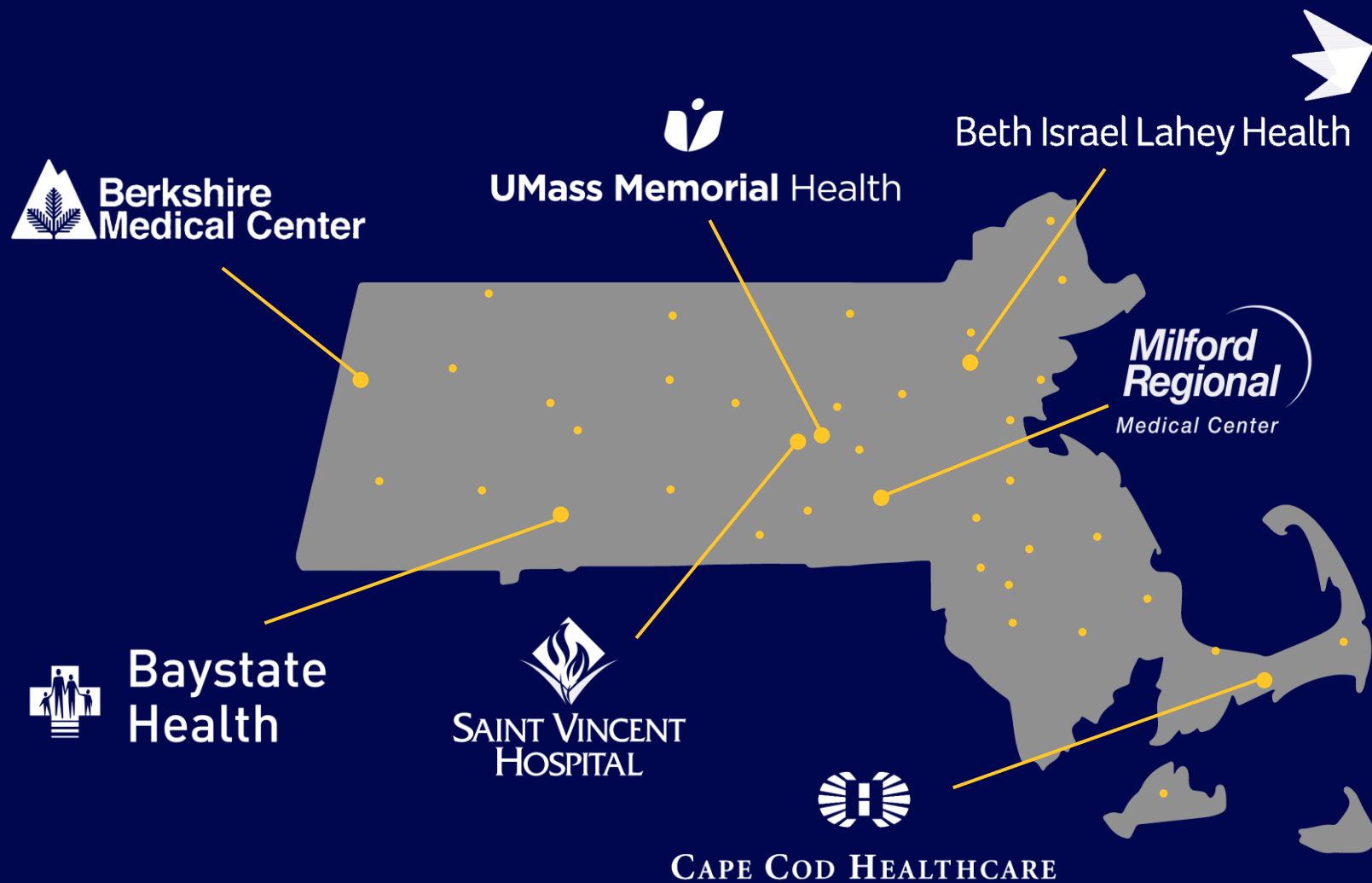
Education

- 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





Regional Campuses





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



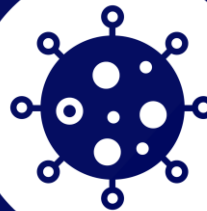
Nobel Prize-winning
biomedical research enterprise
attracts more than
\$300 million
in funding annually.





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



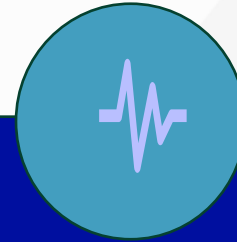
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**Pending
Protocols**



79 %

**Therapeutic/
Vaccine
Trials**



2,498

**Study
Participants**



19

**Principal
Investigators**

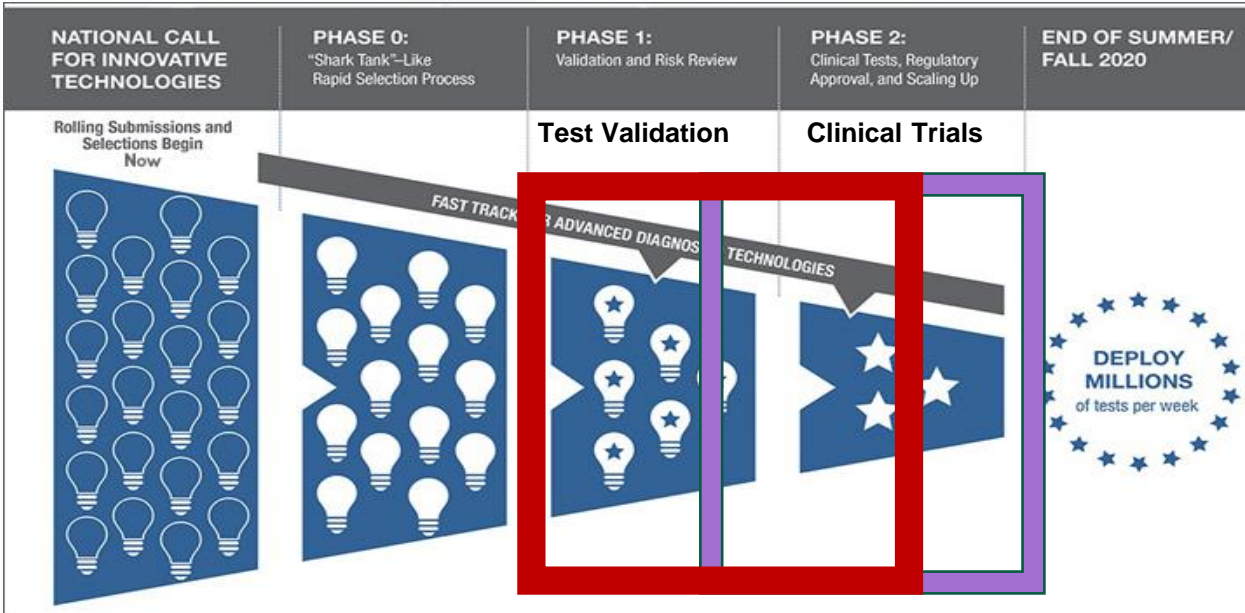


Rapid Acceleration of Diagnostics (RADx)

The Center for Advancing Point of Care Technology (CAPCaT)



Academic partners: JHU, Northwestern, U Illinois, Emory



EUA's: Maxim, Mesa, Quanterix, Microgem



Home / Medical Devices / Medical Device Safety / Safety Communications / At-Home COVID-19 Antigen Tests Take Steps to Reduce Your Risk of False Negative: FDA Safety Communication

At-Home COVID-19 Antigen Tests-Take Steps to Reduce Your Risk of False Negative: FDA Safety Communication



COVID-19 rapid tests can breed confusion – here's how to make sense of the results and what to do, according to 3 testing experts



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



Prize for Academic Collaboration and Excellence (PACE) (UMass Memorial Medical Group)

5th Annual PACE Awards: 2022

- UMass CCTS funded one of two awards (\$170,000).

6th Annual PACE Awards

- RFA: February 2023
- CO-sponsored by UMMMMG and UMass CCTS
- Collaborating on scientific review and funding
- UMMMMG \$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



**CENTER FOR CLINICAL AND
TRANSLATIONAL SCIENCE**



**John E. Harris,
MD, PhD**

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**

Strategic Priority Areas



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



Collaborative in Health Equity

- 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.



Collaborative in Health Equity

- **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.





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

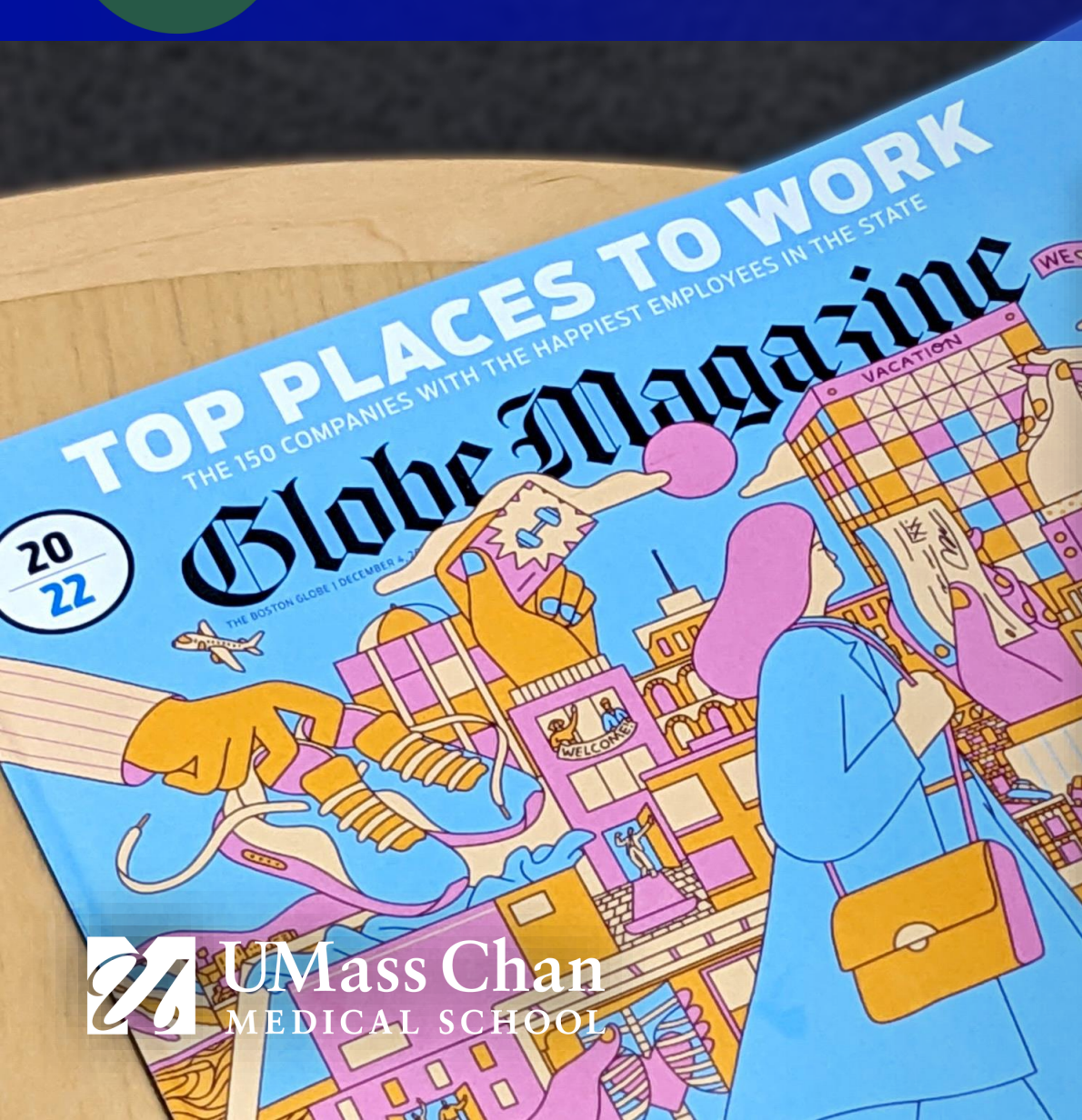


Operational Impact & Financial Stewardship

- 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



Boston Globe's Top Places to Work



Worcester

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



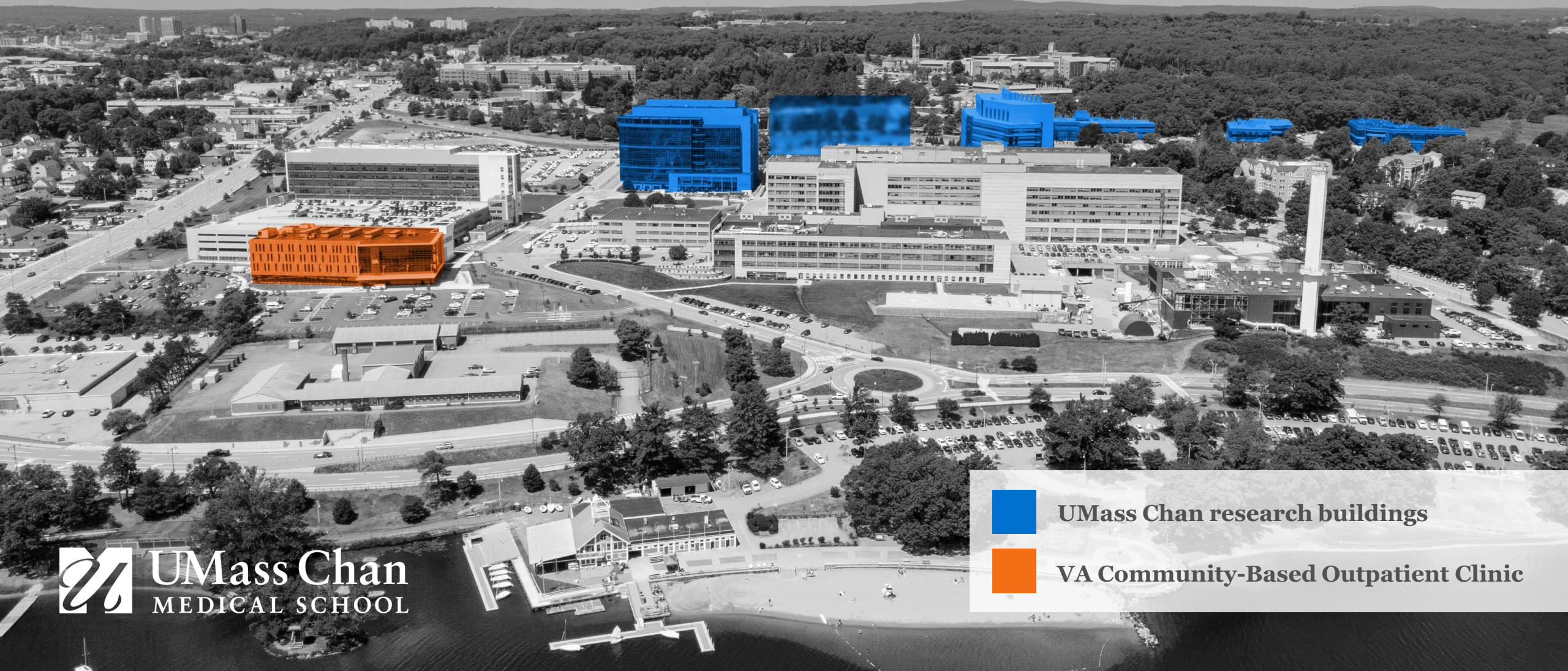


The Expanding Campus Footprint





The Expanding Campus Footprint





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

AMERICA'S
**Greatest
Workplaces**
2023



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

