

Beth Israel Lahey Health



# Beth Israel Lahey Health Research & Education Update

2024



# A Message from the Beth Israel Lahey Health Chief Academic Officer

Dear Colleagues,

As Chief Academic Officer for Beth Israel Lahey Health, I am delighted to offer this BILH Research and Education Update highlighting some of the remarkable accomplishments happening in Research and Education across our health care system. This publication showcases just a few examples from the work of our faculty, trainees, and staff, and the innovations, discoveries and collaborations that will help shape the future of medicine.

Our dedication to advancing knowledge and improving patient care through research and education has never been stronger. The achievements we feature here reflect the power of collaboration and the commitment to excellence that defines our entire system. Together, we are leveraging our diverse expertise and shared resources to push the boundaries of what's possible. Our accomplishments in 2024 were laudable and set the stage for ambitious goals for 2025.

I hope you find inspiration as you read through these pages and I encourage you to stay engaged with the incredible investigation, education and mentorship taking place in our laboratories, clinics and beyond.

Thank you for being a part of our incredible academic community.

Warm regards,

**Gyongyi Szabo, MD, PhD**

Chief Academic Officer, Beth Israel Lahey Health

# Educating the Next Generation of Investigators and Caregivers



Research fellow Dhrumil Patil sings the praises of his mentor, clinician-investigator Stephen P. Juraschek.

Education across BILH takes many forms. We have students who come to us from high school, college and medical school; physician interns and residents working toward specialty and primary care careers; fellows pursuing both clinical and research careers; and a variety of events and initiatives that encourage collaboration and learning. Our faculties, associated with a variety of medical schools including Harvard Medical School (HMS) and UMass Chan Medical School (UMass-Chan), take immense pride in mentoring and teaching the next generation of physicians, academicians, investigators, and physician investigators.

We are pleased to offer just a few examples of these efforts.

## Carl J. Shapiro Institute for Education and Research at Beth Israel Deaconess Medical Center (BIDMC)



Richard Schwartzstein, MD, Executive Director, Carl J. Shapiro Institute for Education and Research and Meredith Atkins, MD, Associate Director of the Shapiro Institute for Education and Research, Director of Undergraduate Medical Education at BIDMC, and BIDMC site Director for Harvard Medical School's Principal Clinical Experience, host a networking event, which brought BIDMC investigators and HMS students together to meet each other and learn about opportunities for training and mentoring.

[The Carl J. Shapiro Institute for Education and Research](#) at BIDMC led by [Richard Schwartzstein, MD](#), and known as The Shapiro Institute, is another manifestation of our dedication to the future of clinical care delivery, research and education. It provides intellectual leadership, state-of-the-art facilities, and faculty and staff resources to support, promote and develop innovative programs and models for the dual activities of teaching and conducting education research at academic medical centers.

One of its programs—the BIDMC [Shapiro Scholars](#) program—in partnership with the newly formed [Office of Student Engagement and Experience](#), works through departments and research laboratories at BIDMC to host and mentor HMS students to promote their growth and development as investigators, with the hope of cultivating longer-term relationships between participating departments and students. Depending on students' interests, supplementary clinical learning experiences in simulation and the medical Intensive Care Unit (ICU) may also be offered. This year, we have more than 20 project opportunities for HMS students across 13 disciplines and counting, and the goal is to fill every project with an HMS student this coming summer.

The Shapiro Institute's depth and breadth of programs include undergraduate, graduate and continuing medical education, the Millenium Conference, and the Simulation Center. Read more about it on their [website](#).

## UMass-Chan Lahey Regional Medical School Campus



Left to right: Sana Baban, Jessica Pan, Sophia Rose, and Ethan Jose Chivi are members of the inaugural UMass-Chan Medical School class of medical students participating in the LEAD@Lahey track at UMass-Chan Lahey's regional medical school campus. PHOTO CREDIT: Bryan Goodchild, UMass Chan Medical School.

Under the leadership of Lahey Chief Academic Officer Anne Mosenthal, MD, FACS, Lahey Hospital & Medical Center (LHMC) recently became the site of the UMass Chan-Lahey regional medical school campus, in collaboration with UMass Chan Medical School. As part of that collaboration, the two organizations launched an innovative and transformative educational initiative called **LEAD@Lahey**. This learning track—which stands for Lead, Empower, Advocate, and Deliver—is designed to equip students with a broad range of skills to effectively and ethically lead health care organizations in the future.

**“We are eager to begin developing leaders in the medical profession who will lead health systems and policy for the future and address access, equity, and social determinants of health,”** said Anne Mosenthal, MD, Lahey Hospital & Medical Center’s chief academic officer and regional executive dean of UMass Chan-Lahey. **“Our partnership as UMass Chan-Lahey stands as a unique approach to medical education here in Massachusetts, an approach that will prepare our future physicians and providers to be at the forefront of innovation and advancement in their fields.”**

**Anne Mosenthal MD**, Lahey Hospital & Medical Center’s chief academic officer and regional executive dean of UMass Chan-Lahey

## Artificial Intelligence/Machine Learning Speaker Series and BILH-wide Symposium



The pace of discovery is accelerating all the time and that has never been more true than now, with the rapid growth of Artificial Intelligence (AI) and Machine Learning (ML). The BILH Chief Academic Officer Speaker Series for 2024 featured investigators and clinicians who are using AI and ML for research and patient care. The speaker series included:

- The Digital Surgeon: Using Data Science to Augment Surgical Performance by **Gabriel Brat, MD, MPH**, BIDMC Trauma Surgery, Director, Surgical Informatics Lab
- Personalized Radiology: Machine Learning for Tailored Imaging Protocols, by **Seth Berkowitz, MD**, BIDMC Interventional Radiology, Division of Clinical Informatics.
- Computer Vision for Colorectal Cancer Prevention: A View from the GI Suite by **Tyler Berzin, MD**, BIDMC Gastroenterology, ASGE AI Task Force.

In February 2025, the CAO’s office—in partnership with the BIDMC Center for Healthcare Delivery Science and a scientific committee representative of BILH entities—hosted the first BILH Artificial Intelligence and Machine Learning (AI/ML) Symposium, held at the Joseph B. Martin Center at Harvard Medical School. Topics included how AI/ML can assist with imaging and disease detection, provide opportunities for improving efficiency in health care operations and advance research and innovation across the spectrum of translational research, from concept development to implementation across all clinical areas at BILH. The event also showcased institutional resources in AI/ML research and innovation.

## Supporting Fellows, Residents and Interns

BILH supports 170 residencies and fellowships across the system ranging from BIDMC's Clinical Cardiac Electrophysiology Fellowships to LHMC's Diagnostic Radiology Residency to New England Baptist's Hand Surgery Fellowship and many, many more.

Post-graduate physicians and other health professionals are mentored and supported in a variety of ways including through Fellows' Councils and early career physician development resources at BIDMC through the [Center for Career Development](#).

As the health care leadership of tomorrow, our fellows, residents and interns are called upon to question and solve problems in health policy, health care delivery, and the health care environment. Postgraduate physicians at BILH are provided with formal and informal educational and networking opportunities. For example:

- Trainees at BIDMC may participate in sustainability research, and suggest, design and execute sustainability initiatives and projects with guidance from physician leaders across disciplines including Emergency Medicine, Infectious Disease, Pulmonary and Critical Care, Internal Medicine, and Anesthesia.
- State-of-the-art simulation centers at [BIDMC](#) and [LHMC](#) offer trainees (as well as mid-career professionals and teams) the chance to hone their skills and get constructive feedback.
- At Joslin, clinical and research fellows are invited to lectures twice weekly to hear from faculty and experts from around the country.
- BIDMC and New England Baptist Hospital host annual research retreats where residents and fellows are welcome to present their research and further develop their presentation skills.

Through hands-on training, research opportunities in leading-edge labs, and a commitment to compassionate care, BILH equips the next generation of health care providers with the expertise and values they need to thrive in an ever-changing world.

## Celebrating and Supporting Women in Science



BILH celebrates the International Day of Women in Science every February 11 by spotlighting women's contributions and reaffirming the organization's commitment to research and innovation.

In February 2025, Rochelle Walensky, MD, MPH, former director of the U.S. Centers for Disease Control and Prevention, was the featured guest at BILH's Women in Science event, participating in a "fireside chat" with CAO Szabo and Susan Moffatt-Bruce, MD, PhD, Divisional President and President of Lahey Hospital & Medical Center about her experiences leading the nation's scientific response to COVID-19 during the darkest days of the pandemic.



2024's Women in Science event featured an in-person networking event for fellows, junior investigators and investigators and virtual presentations by BILH leaders and scientists. [A video celebrating our female faculty](#)—from fellows to full professors—highlighted their contributions to BILH's research and education profile.

**"As we know, broad perspectives, including from women, have proven essential to innovation, discovery, education, and improving care."**

**Gyongyi Szabo, MD, PhD**, BILH and BIDMC Chief Academic Officer



# Envisioning the Future

**InSPIRE 2030**

**InSPIRE 2030, Beth Israel Deaconess Medical Center's multi-year Institutional Strategic Plan for Innovation, Research, and Education, defines how we will propel scientific discoveries into extraordinary patient care.**

- Cultivate an Entrepreneurial Culture**  
Cultivating an entrepreneurial culture by increasing industry collaborations supporting investigators for success in the start-up ecosystem, and enhancing business development activity will accelerate innovation, collaboration, and industry investment.
- Develop Physicians, Scientists, and Educators**  
Through empowering career development efforts that ensure an equitable and supportive environment, we will be successful in recruiting and building the careers of a diverse and inclusive community of researchers and healthcare providers.
- Enable Organizational Effectiveness & Financial Stewardship**  
Recognizing resources are not infinite, we will realize an increase in grant funding, and success in recruiting world-class investigators, by securing additional research space and offering outstanding research core facilities. We will improve stakeholder satisfaction by transforming into high-performing research operations.
- Engage Through Compelling Narratives**  
We will take pride in the identity of BIDMC as an academic medical center and promote the importance of research and education through compelling narratives created to attract the attention and support of patients, peers, the public, industry, donors, and funders.
- Catalyze Discovery and Innovation**  
Launching from the success of our Translational Research Hubs, we will build collaborative multi-disciplinary grants and projects, and partnerships with Joslin Diabetes Center, Dana-Farber Cancer Institute, and our colleagues in other Beth Israel Lahey Health organizations to advance discoveries from the bench to the bedside and into communities.
- Strengthen Research Capabilities and Data Infrastructure**  
We will invest in a robust research information Technology infrastructure, including data science, artificial intelligence/machine learning, high-performance computing, and bio-banking, necessary as the foundation for scientific breakthroughs, and develop a BILH-wide clinical research network.

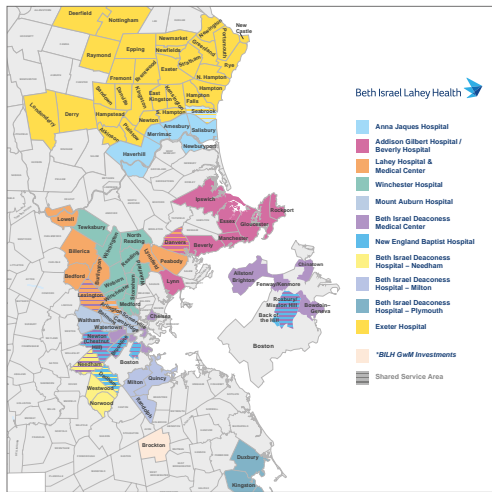
June 11, 2024 - Office of the Chief Academic Officer

In 2020, we engaged hundreds of voices to develop the BIDMC **Institutional Strategic Plan for Innovation, Research, and Education (InSPIRE)**, launching the plan in 2022. We set out ambitious, aspirational initiatives to advance knowledge, encourage discovery and foster innovation, all with the goal of translating our research into extraordinary patient care.

Three years in, we have taken stock of our accomplishments and identified remaining challenges, while considering the impact of newly emerged partnership opportunities. Over these last few years, much has happened: BILH launched its strategic plan Blueprint 2030; Joslin Diabetes Center joined BILH; a cancer collaboration and proposed cancer hospital in partnership with Dana-Farber Cancer Institute was announced; the OneBILH Epic electronic health record was rolled out; and new industry partnerships and the potential for large, multi-institutional awards through mechanisms like **ARPA-H** (the Advanced Research Projects Agency for Health) came into play. We now find ourselves with an opportunity to refresh, renew and recommit to a plan that will propel our scientific discoveries into extraordinary patient care.

We look forward to working with our colleagues throughout BIDMC as we train the next generation of educators and scientists and bring our discoveries for the care, cure and comfort of patients to our region, our nation and our world.

## Power of Research



Our ability to transform health care depends on the rigorous research that drives new discoveries and informs evidence-based care. Our health system, anchored by more than one academic medical center, is uniquely positioned to accelerate bench-to-bedside breakthroughs in fields such as metabolic disease, immunology, neuroscience, and cancer.

Through our BILH **Clinical Research Network**, we will bring leading-edge clinical trials to our communities, making these advancements more accessible to all. This deep connection between care and research ensures that every aspect of our work, from community health initiatives to cutting-edge treatments, is grounded in evidence and driven by innovation.

One major tool now enhancing clinical trials across BILH is **OneBILH Epic**, our Electronic Health Record. Implementing Epic represents a giant step toward a powerful infrastructure for academic research, improving data accessibility, efficiency, and the potential for groundbreaking discoveries.

**Epic** provides secure and confidential access to patient data that enables BILH researchers to efficiently identify, recruit and consent clinical trial participants. Standardizing data across BILH's hospitals, clinical units and care settings, Epic improves the reliability of research findings and enables comparisons across studies and institutions. The platform also fosters collaboration, allowing multi-site research to be conducted seamlessly across hospitals, departments and regions. BILH also entered into a system-wide agreement with TriNetX, which offers researchers data that is current, HIPAA and GDPR compliant and clinically broad, opening a new range of research possibilities.



Supporting these efforts, **BILH's Institutional Review Boards (IRB)** have developed a Reliance Agreement to promote cross-institutional collaboration. This agreement strengthens the BILH Clinical Research Network, helping researchers collaborate seamlessly. In addition, BIDMC's IRB Navigation program provides personalized guidance for junior faculty, fellows and residents, guiding them through every step of the IRB process, and allowing our investigators to spend more time pursuing important discoveries.

## Clinical Research Facility Investments



Lahey Hospital & Medical Center recently invested in renovating a hospital floor into a new clinical research center (CRC). The renovated space is the latest investment in physical spaces dedicated to conducting both care and clinical research across BILH. This type of investment further establishes BILH hospitals and research centers as critical hubs for advancing medicine and improving the health of our communities. The renovated site at LHMC will complement the other CRC sites at BIDMC, BID Needham and Joslin Diabetes Center.

Clinical research bridges the gap between research and delivery of care at the bedside and provides patients with early access to innovative treatments, reduces health disparities by reaching underserved populations, while investigators gather critical data, test new therapies and interventions, and refine medical advancements in real-world settings.

## Translational Research Hubs



### BIDMC Translational Research Hubs

Many of those innovative therapies and interventions are hatched in BIDMC's own labs, often fostered by the four [Translational Research Hubs](#), launched in 2022 under the leadership of BILH CAO Gyongyi Szabo, MD, PhD, and a multi-disciplinary steering committee of senior investigators as part of the original InSPIRE plan.

BIDMC's Translational Research Hubs are vibrant communities of basic, translational and physician-scientists working across disciplines to accelerate discoveries in the lab into patient care practices, therapies, technology, and medicines. Each Hub focuses on a distinct research area and leverages BIDMC's shared core facilities to enhance collaboration between lab researchers and clinicians.

**“Early-stage investigators just establishing their research programs will find support through the Hubs in the form of networking, mentorship, collaboration and community among their colleagues in scientific and medical discovery”**

**Gyongyi Szabo, MD, PhD**, BILH and BIDMC Chief Academic Officer

These Hubs also play a crucial role in creating collaborations between basic scientists and clinicians that help secure institutional, government and foundation grants keeping BIDMC at the forefront of medical science.

## Supporting our Scientists

The Hubs have introduced a number of events and initiatives in support of our BILH investigators. The [BILH Technology Ventures Office](#) hosted a Translational Research Hub Industry Showcase featuring an interdisciplinary collaborative of investigators focused on the [Systemic Effects of Metabolic Disease](#). Distinguished investigators from BIDMC and Joslin Diabetes Center joined with industry leaders to highlight their pioneering work in metabolic diseases including obesity, insulin resistance, diabetes and its many complications.

To further support high-risk, high-reward investigations and structured to encourage innovative, interdisciplinary translational research, the annual [Spark Grant Awards](#) were introduced in 2022 as part of BIDMC's five-year Institutional Strategic Plan for Innovation, Research & Education (InSPIRE). Designed to support higher-risk projects that would otherwise be difficult to fund through more traditional mechanisms, the Spark Grant program has provided a total of 17 projects with Spark Grants of \$50,000 each to date.

# Stronger Together: Cross-System Collaboration Drives Innovation and Excellence in Health Care

While Beth Israel Lahey Health is a relatively young academic health care system, collaborations among researchers and academicians are accelerating across our varied and diverse organizations. We believe that a diversity of expertise, lived experience and areas of interest will benefit both our faculty and staff and the people we serve in our communities.

## BIDMC Research Retreat: Uniting Investigators and Creating Relationships



In 2024, BIDMC's annual Research Retreat drew record attendance, marking a pivotal step in advancing the scientific innovations that support tomorrow's clinical breakthroughs. Close to 550 members of the research community came together at Harvard Medical School's Joseph B. Martin Conference Center to exchange ideas and share research, with more than 180 poster presentations and 36 investigator talks underscoring the impressive range of work at BIDMC, and collaborations with other BILH institutions. Presentations spanned basic, translational, clinical, and health sciences research, and discussions included topics such as AI/ML applications, RNA-based therapeutics and gender-based research.



The retreat concluded with a **PitchIt! Competition** hosted by the Technology Ventures Office (TVO) where investigators had five minutes to take the live stage to "pitch" their ideas to a panel of industry and academic leaders resulting in one idea picked for support.

**Left: Carmelo Nucera, MD, PhD, Associate Professor, Pathology, presents his project, [Assessment of a new lincRNA as biomarker for the prediction of thyroid cancer,](#)" to the PitchIt! panel of judges**

## Expanding Educational Horizons Across Our Health System



This collegial spirit extends deeply into clinical specialties. For more than a decade, the [BIDMC/Joslin Diabetes Center Fellowship in Endocrinology, Diabetes, and Metabolism](#) has nurtured emerging specialists dedicated to improving diabetes care. Jointly staffed by clinicians and researchers, the fellowship focuses on research advancements in type 1 and type 2 diabetes and obesity. The fellowship's reach is broad, encompassing both bench-based and clinical research, as well as a commitment to teaching excellence in Harvard Medical School-affiliated settings.

Another powerful example of cross-campus synergy is the [BILH Simulation Symposium](#), which hosts leaders from BIDMC, [LHMC](#), and Beverly Hospital to focus on advancing simulation-based education and fostering a collaborative framework for medical training.

**"This symposium represents a powerful first step toward unifying BILH institutions for shared educational goals. These initiatives are only the beginning of what's possible when our campuses come together."**

**Gyongyi Szabo, MD, PhD, BILH and BIDMC Chief Academic Officer**



# Moving Out of the Lab and Into the Marketplace

Each year, investigators from BILH contribute thousands of groundbreaking studies to peer-reviewed journals, propelling science forward. Supporting this work, [BILH's Technology Ventures Office](#) (TVO) plays a critical role in translating [research](#) and innovation into real-world solutions that benefit society. By working closely with BILH investigators in their labs and clinics, TVO's Technology Licensing Officers manage intellectual property, negotiate agreements and build alliances with industry partners. Their work accelerates BILH's mission to transform discoveries into life-saving therapies and diagnostic tools. Some highlights:

- BIDMC secured \$6 million in grants from the [Massachusetts Life Sciences Center](#) to support our BioDatabank and research across areas such as kidney disease, infectious diseases, metabolic health, and women's health.
- BIDMC received a \$9 million [ARPA-H contract](#), led by BIDMC's David Alsop, PhD, in collaboration with GE, with \$5 million designated to advance magnetic resonance imaging for identifying brain disease in women.
- The 2023 Metabolic Disease Hub Industry Showcase brought significant industry attention to [BIDMC](#) and [Joslin Diabetes Center](#) investigators' work on systems, disease pathology, and emerging treatments, leading to major pharmaceutical company funding in kidney disease for two BIDMC investigators.
- A team of Joslin investigators led by Peng Yi, PhD, were the recipients of an award selected by Novo Nordisk and Evotec. The team's project, which focuses on type 1 diabetes with a novel target approach aimed at modulating autoimmune response, was among three projects selected to be developed in the companies' LAB eN2, a translational drug discovery accelerator, launched in 2023 with Harvard University, Mass General Brigham, Yale School of Medicine and Beth Israel Deaconess Medical Center.
- BIDMC investigators have successfully spun-out multiple companies, such as AptaDir and Elucidate Bio.

Finally, in the past year, nine BIDMC researchers collaborated with TVO to navigate regulatory and clinical trial challenges, moving their discoveries from the lab bench to marketplace. Among these efforts are two impressive cases where basic science discoveries evolved into life-saving tools. In 2010, [BIDMC's Martin Pollak, MD, and David Friedman, MD](#), identified two gene variants that heighten kidney disease risk among individuals of recent African ancestry. With industry partners, the team developed an investigational molecule targeting these variants, now in phase 3 trials.

BIDMC neurologists [Christopher Gibbons, MD, and Roy Freeman, MD](#), also brought to market a skin biopsy test detecting abnormal alpha-synuclein—a biomarker for Parkinson's disease—providing earlier, more accurate diagnoses and enabling faster development of targeted treatments.

Additionally, three past recipients of Harvard Medical School's [Blavatnik Therapeutic Challenge](#) grants have drug candidates advancing toward human trials. These include treatments for cancer-related clotting, gene therapy for diabetes, and new solutions for frozen shoulders. Meanwhile, [Resalis Therapeutics](#), co-founded by a former BIDMC investigator, is also moving forward with a non-coding RNA drug candidate aimed at treating obesity and fatty liver disease, and Comanche Biopharma, has an investigational siRNA medicine in evaluation for pre-term preeclampsia treatment.

These groundbreaking advancements underscore BILH's commitment to translating scientific research into concrete health benefits. Through strategic partnerships and the support of the TVO, BILH ensures that today's innovations evolve from the laboratory to become the life-saving solutions of tomorrow.

# Research Roundup: Many Campuses, One Mission: Advancing Discovery in New England

Beth Israel Lahey Health includes hospitals, outpatient specialty clinics and research centers, community hospitals, urgent care centers and primary care practices serving more than 1.3 million patients across eastern Massachusetts and southern New Hampshire. This represents a unique opportunity for collaboration in research and education across our system. The five leading medical research institutions within BILH—BIDMC, Joslin Diabetes Center, LHMC, Mount Auburn Hospital, and New England Baptist Hospital— have deep histories in New England and national and international reputations and each brings its distinct history, culture and strengths. The following are two examples from each of those iconic organizations which represent the incredible collective work of a health care system committed to driving innovation, enhancing patient care, and improving the health and well-being of our entire region.

## BIDMC: New Pathways to Progress-Rethinking Disease



At BIDMC, researchers have uncovered a startling link between damage to the lining of the upper gastrointestinal (GI) tract and a significantly higher risk of Parkinson's disease. [This gut-first approach to Parkinson's disease](#), published in [JAMA Network Open](#), offers a deeper understanding of how the disease might develop and points to opportunities for early intervention. This research underscores the importance of monitoring patients with conditions like GERD or H. pylori infection, offering hope for early detection and targeted therapies.

Meanwhile, BIDMC's Center for Virology and Vaccine Research (CVVR), led by [Dan H. Barouch](#), MD, PhD, continues to push boundaries in the fight to end the HIV epidemic. [Recent studies](#) demonstrated that a cocktail of broadly neutralizing antibodies can significantly reduce viral loads, presenting a potentially transformative approach to treatment. Like Barouch's pioneering work that [contributed to the COVID-19 vaccines](#), his lab's efforts highlight the hospital's pivotal role in addressing global health crises.

## Joslin Diabetes Center: Transforming Diabetes Care



At Joslin Diabetes Center, researchers are rewriting the narrative of type 1 diabetes (T1D). Researchers led by Rohit Kulkarni, MD, PhD, recently discovered that pancreatic  $\beta$ -cells, which produce insulin, may play an active role in triggering their own destruction in T1D. By identifying the m6A pathway as a key factor in  $\beta$ -cell survival, [Rohit Kulkarni](#), MD, PhD, and his team have opened the door to innovative therapies that could slow disease progression, as published in [Nature Cell Biology](#).

Complementing this work, Joslin researchers are addressing gaps in the care for health complications due to diabetes. A decade-long study of nearly 27,000 patients with diabetic retinopathy revealed that less than half of those with vision-threatening conditions were aware of their diagnosis. Led by [Paolo S. Silva](#), MD, co-chief of telemedicine at the [Beetham Eye Institute](#) at Joslin, the research highlights the need for improved communication and follow-up care to prevent vision loss. These findings, published in [Diabetes Care](#), underline the critical role of education and outreach in diabetes management.

## Lahey Hospital & Medical Center: Addressing Environmental and Cardiovascular Health



Lahey Hospital & Medical Center (LHMC) is tackling the intersection of the environment and public health. In a joint [study](#) with BIDMC, [Sarju B. Ganatra](#), MD, Medical Director of Sustainability at LHMC, links long-term exposure to air pollution with increased cardiovascular and cancer mortality, particularly in underserved rural areas.

Another [study](#) led by Ganatra projects significant health benefits from the Inflation Reduction Act's climate policies, including preventing tens of thousands of deaths and saving billions in health care costs. These findings, published in [The American Journal of Preventive Cardiology](#), underscore the transformative potential of climate action.

## Mount Auburn Hospital: Compassionate Innovations



Two recent studies highlight Mount Auburn Hospital's focus on improving outcomes for breastfeeding mothers and their infants.

A [first-of-its-kind survey](#) of breastfeeding physicians, led by Melissa Bartick, MD, examined bedsharing practices among new mothers. The study, published in PLoS ONE, found that bedsharing, while not aligned with current U.S. sleep guidelines, facilitated longer breastfeeding durations and better sleep quality for mothers and infants. These findings suggest a need to reconsider guidelines to better reflect real-life practices.

Additionally, Bartick analyzed the economic implications of barriers to breastfeeding. Published in Health Policy and Planning, her research revealed that the U.S. loses over \$100 billion annually due to low breastfeeding rates. Addressing these barriers offers a path to improving both public health and economic outcomes.

## New England Baptist Hospital: Pioneering Orthopedic Care



Synonymous with excellence in orthopedic surgery, [New England Baptist Hospital](#) (NEBH) is at the forefront of clinical research, providing the data required to continuously improve upon the care they provide.

Hip and knee joint replacements are among the most frequently performed surgeries in the U.S., and a recent series of studies conducted by NEBH's physician-researchers explores ways to predict and prevent adverse outcomes in total joint arthroplasty (TJA). [One study](#) led by Eric L. Smith, MD, examined the growing trend of performing revision total knee arthroplasty in outpatient settings, showing that outpatient surgery could be a safer and more effective alternative that leads to shorter recovery times and higher patient satisfaction.

Other NEBH studies evaluated different [materials](#) and different [surgical techniques](#) for safety and efficacy, analyzing the risk of complications in hip and knee replacements. This valuable insight enables surgeons to refine techniques, minimize complications and improve outcomes for patients, continuing NEBH's tradition of excellence in orthopedic care, and benefiting patients across the region and around the world.

## An Ongoing Commitment to Advancing Research and Education

Across BILH's hospitals, these pioneering efforts reflect a shared mission: to make health care more effective, equitable and compassionate. From uncovering new pathways in disease development to addressing environmental health disparities and pioneering excellence in surgical care, these institutions are transforming lives and communities, reinforcing their collective impact on the region's health.

Beth Israel Lahey Health   
Beth Israel Deaconess Medical Center

Beth Israel Lahey Health   
Joslin Diabetes Center

Beth Israel Lahey Health   
Lahey Hospital & Medical Center

Beth Israel Lahey Health   
New England Baptist Hospital

Beth Israel Lahey Health   
Mount Auburn Hospital

Beth Israel Lahey Health   
Beth Israel Deaconess Needham

Beth Israel Lahey Health   
Exeter Hospital

Beth Israel Lahey Health   
Beth Israel Deaconess Plymouth