Beth Israel Lahey Health
Lahey Hospital & Medical Center

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The Air We Breathe

Lahey Care-AI-Thon

Friday, May 1st, 2026

'made possible with generous support from Rubin Gruber'

Welcome to the Lahey Care-AI-Thon!

We are excited to welcome you to the inaugural Care AI Thon hosted by the Lahey Hospital and Medical Center Innovation Hub. This event brings together clinicians, innovators, researchers, and innovators to collaborate on advancing lung cancer screening and improving patient outcomes through the responsible use of artificial intelligence.

The Care-AI-Thon represents a unique opportunity to move beyond ideas and into action. Participants will work alongside clinical and operational experts to design practical solutions that address real challenges in early detection, workflow optimization, and patient engagement. Our shared goal is to develop scalable approaches that can be implemented within the Lahey ecosystem and beyond.

Today's program is designed to foster collaboration, creativity, and meaningful progress. Through presentations, workshops, and team based development, we aim to generate collaborative proposals that have the potential to become real world pilots. We are grateful for your participation and look forward to a day of thoughtful discussion, innovation, and impact.

Event Agenda

Time Window	Activity
08:00 - 08:45	Registration & Networking
08:45 - 09:30	Welcome & Lung Screening Team Intro
09:30 - 10:30	Team Introductions + Intro to Workshops
10:30 - 10:45	Morning Break
10:45 - 13:00	Co-Design Sessions
13:00 - 13:30	Final Presentation Prep & Afternoon Guest Arrival
13:30 - 15:00	Final Presentations + Award

Lahey Lung Screening

Lung cancer remains the leading cause of cancer death in the United States, yet it is highly treatable when caught early — with 5-year survival rates approaching 90% at stage 1.

Lahey Hospital & Medical Center has been at the forefront of lung cancer screening for years. As the first facility in the United States to receive accreditation as a Lung Cancer Screening Center by the American College of Radiology, Lahey didn't just meet the standard — it helped define it, serving as a national model program for others to follow.

Today, the majority of cancers identified through Lahey's screening program are caught at stage 1, the most treatable stage — a direct result of the program's early intervention approach and commitment to high-risk patient identification.

The work being showcased at today's Innovation Hub builds directly on this foundation, addressing the remaining barriers that prevent eligible patients from ever reaching screening in the first place.

Care-AI-Thon Judges

Susan Moffatt-Bruce, MD, PhD
President of LHMC

Efe Sumer
Neuroscientist | Life Sciences Investor

Rubin Gruber
Metrika,
Chairman Of The Board

Kim Rieger-Christ
VP of Research,
Director of Cancer Research

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Lahey Innovation Hub Team Members

Kim Rieger-Christ,

VP of Research, Director of Cancer Research

Jalil Afnan, MD,

Department Chair Radiology

Sarju Ganatra, MD,

Vice Chair, Department of Medicine (Research)

Richard Meiklejohn, MBA,

Director, Lahey Innovation Hub

Care-AI-Thon Experts

Errol Norwitz
Healthcare Executive | Physician-Scientist

Jeffrey Champagne
Champagne Strategic Advisors

Jim Schoomaker
Innovation Machines

Paul Swider
RealActivity - Chairman, CEO

Lahey Team Members

Adam Medina
Radiology Solutions Architect

Alyssa Evans
Epic Leader

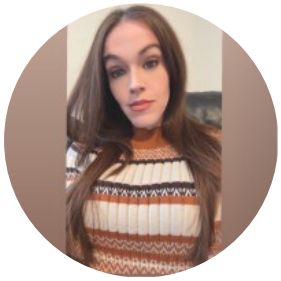
Amy Moldrem
Director of Breast Surgery

Angela Tambini
Executive Director Cancer Services

Ashley Amico
Nurse Navigator Pulmonary & Critical Care

Carla Lamb
Director of Interventional Pulmonology,
CT Lung Screening Steering Committee

Cheryl Arena



Elizabeth Wilson
Lung Cancer Screening Program Manager

Lahey Team Members

Elliot Servais
Interim Chairman, Department of Surgery

Helena Hamilton
Nurse Navigator Pulmonary & Critical Care

Henry Ssemaganda,
Senior Data Analyst

Neha Khairnar
Software Engineering Lead

Patricia Doyle
Executive Director, Radiology

Richard Thomas
Radiology Physician

Umber Shafiq
Enterprise Analytics & Operations Leader

UMass Chan Lahey Medical Students

Brennan Chuang
Medical Student UMass Chan - Lahey

Nadia Bokhari
Medical Student UMass Chan - Lahey

Piper Stacey
Medical Student UMass Chan - Lahey

Sarah Pearson
Medical Student UMass Chan - Lahey

Track A Team

qure.ai

Qure.ai is a New York-based AI company offering an end-to-end lung cancer detection platform powered by computer vision, LLMs, and agentic AI. Their suite includes tools to flag nodules on chest X-rays, guide next steps for CT-detected nodules, and automatically track patients to prevent follow-up failures. The company has been selected as a partner by both Intuitive Surgical and Microsoft.

Samir Shah

Danny Garrison

Roanna Kingman

Henry Woo

Problem Being Addressed:

Lung cancer detection suffers from missed nodules on X-rays, false positive overload for nurse navigators, inconsistent CT nodule measurement, and reimbursement and tumor board inefficiencies — all contributing to delayed diagnosis and poor stage shift outcomes.

Solution Summary:

Qure.ai's platform covers the full nodule workflow across three tools:
qXR-LN for X-ray detection, **qCT-LN** for CT-based next steps, and **qTrack** for patient follow-up — reducing missed findings, false positives, and follow-up failures.

Track A Team

RevealDx is a Seattle-based company with an FDA-approved AI software called RevealAI-Lung that integrates into radiology workflows to analyze lung nodules found on CT scans. Using advanced radiomics, it detects potential malignancies as small as 4mm — including features invisible to the human eye — helping clinicians make earlier, more informed decisions about intervention. It operates on a pay-per-click model and is currently in active clinical use.

Mathew Brevard

Richard Rosene

Gary Cohen

Problem Being Addressed:

Annual US chest CTs reveal 8 million lung nodules, yet current protocols fail to distinguish benign cases from cancer — creating a massive tracking burden and leaving 70% of lung cancers found too late to cure.

Solution Summary:

RevealAI-Lung identifies invisible radiomic biomarkers at the point of detection, enabling immediate and informed clinical decisions from the first scan rather than defaulting to "wait-and-watch." It integrates across all CT protocols and existing radiology workflows, accelerating early-stage diagnosis without disrupting how teams already work.

Track B Team

Zappix Inc., headquartered in Burlington, MA, offers an AI-powered Patient Engagement Platform that personalizes screening outreach using predictive analytics, conversational AI, and multilingual communication across SMS, voice, and email. Their platform identifies barriers like transportation or language, guides patients through the full screening journey, and has already demonstrated a 2x increase in booked appointments within Lahey's ecosystem.

Robert Barrows

Michael Demers

Prakesh Guggilam

Problem Being Addressed:

Preventative screening programs are severely underutilized due to access and engagement barriers including transportation, language differences, and low digital access. Generic, one-size-fits-all outreach leaves patients falling through the cracks — widening care disparities and driving up missed appointments.

Solution Summary:

Zappix analyzes clinical and SDOH data to prioritize patients and identify individual barriers, then delivers personalized multilingual outreach via SMS, voice, and email. Conversational AI guides patients through scheduling, while adaptive reminders and real-time interventions reduce no-shows — creating a closed-loop system from identification to screening completion.

Track B Team

UMass Chan MEDICAL SCHOOL

UMass Chan Medical School is developing a GenAI-powered chatbot designed to compassionately collect smoking histories from patients to assess lung cancer screening eligibility. Informed by cognitive interviews with 29 patients, the chatbot uses conversational, stigma-reducing techniques to improve accuracy and engagement — addressing the fact that over 80% of EHRs lack complete smoking data needed to identify eligible patients.

Mayuko Ito Fukunaga

Rajani Sadasivam

Julie LeMoine

Problem Being Addressed:

Lung cancer screening uptake remains below 20% largely because EHRs lack accurate smoking histories to confirm eligibility. Existing outreach methods — surveys, portals, and manual calls — are ineffective and often trigger patient stigma, leaving 18 million high-risk Americans unidentified.

Solution Summary:

A GenAI-powered chatbot replaces rigid surveys with compassionate, context-aware dialogue anchored to personal life events and temporal markers — the way patients naturally recall smoking history. The result is improved data accuracy, reduced stigma, and a scalable architecture that operationalizes human interviewing techniques at the point of patient engagement.

Track B Team

Northeastern University

Breath-Well is a Northeastern University student team building PearlPath, an AI assistant that uses a Bayesian Adaptive Symptom Elicitation Engine to uncover hidden clinical risk without directly asking stigmatizing questions. By monitoring patient honesty states and asking indirect questions about daily activities, it generates clinician-ready risk reports and integrates with breast screening registries to identify women eligible for lung cancer screening.

Ruthvik Bandari

Om Patel

Yash Jain

Problem Being Addressed:

Lung cancer stigma causes patients to systematically underreport smoking history and withhold symptoms — creating a hidden patient problem where those who need help most provide the least reliable data. Every layer of the system, from EHRs to outreach, depends on self-reported information that is systematically false.

Solution Summary:

PearlPath uses a Bayesian Adaptive Symptom Elicitation Engine to infer hidden clinical risk through non-threatening conversation about daily activities. A Hidden Markov Model monitors patient honesty in real time, discounting evasive responses mathematically. Clinicians receive a structured risk report with one-click LDCT ordering, while the Pink-to-Pearl pipeline identifies lung screening candidates already engaged in mammography.

Venue & Parking Information

Free parking is available on-site in the areas shaded blue. Follow the white arrows to enter the lot. The star marks the main entrance to the building

The main entrance is located at the front face of the building, visible from Mall Road. An American flag waves at the front door.

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