

LANKENAU INSTITUTE FOR MEDICAL RESEARCH

CATALYST

SPRING/SUMMER 2026



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Lankenau Institute for Medical Research (LIMR) is a nonprofit biomedical research institute located on the campus of Lankenau Medical Center and is part of Main Line Health. Founded in 1927, LIMR's mission is to improve human health and well-being. Using its ACAPRENEURIAL™ organizational model that integrates academic and entrepreneurial approaches, faculty and staff are devoted to advancing innovative new strategies to address formidable medical challenges including cancer, cardiovascular disease, tissue regeneration, gastrointestinal disorders and autoimmune diseases such as rheumatoid arthritis. LIMR's principal investigators conduct basic, preclinical and clinical research, using their findings to explore ways to improve disease detection, diagnosis, treatment and prevention. They are committed to extending the boundaries of human health through technology transfer and training of the next generation of scientists and physicians.

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George C. Prendergast, PhD

The Havens Chair for Biomedical Research

President and CEO

*Lankenau Institute for Medical Research,
Main Line Health*

Exciting new research initiatives launching as LIMR's 2nd century nears

Excitement is building at Lankenau Institute for Medical Research (LIMR). Next year, LIMR will mark its 100th anniversary and honor the extraordinary achievements of its first century that began in a humble building on the corner of Girard and Corinthian in the Fairmount section of Philadelphia.

In the months ahead, we will have more to tell you about events marking this milestone. But part of the excitement is knowing what lies ahead in our second century, much of which is in this issue of *Catalyst*.

While our beginnings in 1927 focused on the novel — now commonly accepted — idea of inflammation as a key driver in cancer, our new beginnings center on an infusion of exceptional research talent and new ideas in the areas of immunity, virology and cardiology.

Amy Rosenfeld, PhD, comes to us from the U.S. Food and Drug Administration, seeking to apply LIMR's unique and recently developed technology to make a new and safer kind of vaccine. Specifically, she is determined to show how this technology can be used to eradicate paralytic polio. An injectable vaccine by Dr. Jonas Salk and an oral version by Dr. Albert Sabin came close to eliminating it but cannot close the door.

Dr. Rosenfeld believes that virus-like particles, which are safe for humans, hold the key to not only paralytic polio but many other viruses. Picking up on the inventive work of Scott Dessain, MD, PhD, and Fetweh al-Saleem, VMD, they will create an antiviral treatment that can be delivered using spirulina, a blue-green algae that is considered a superfood, which would allow people to ingest the treatment at a relatively low cost.

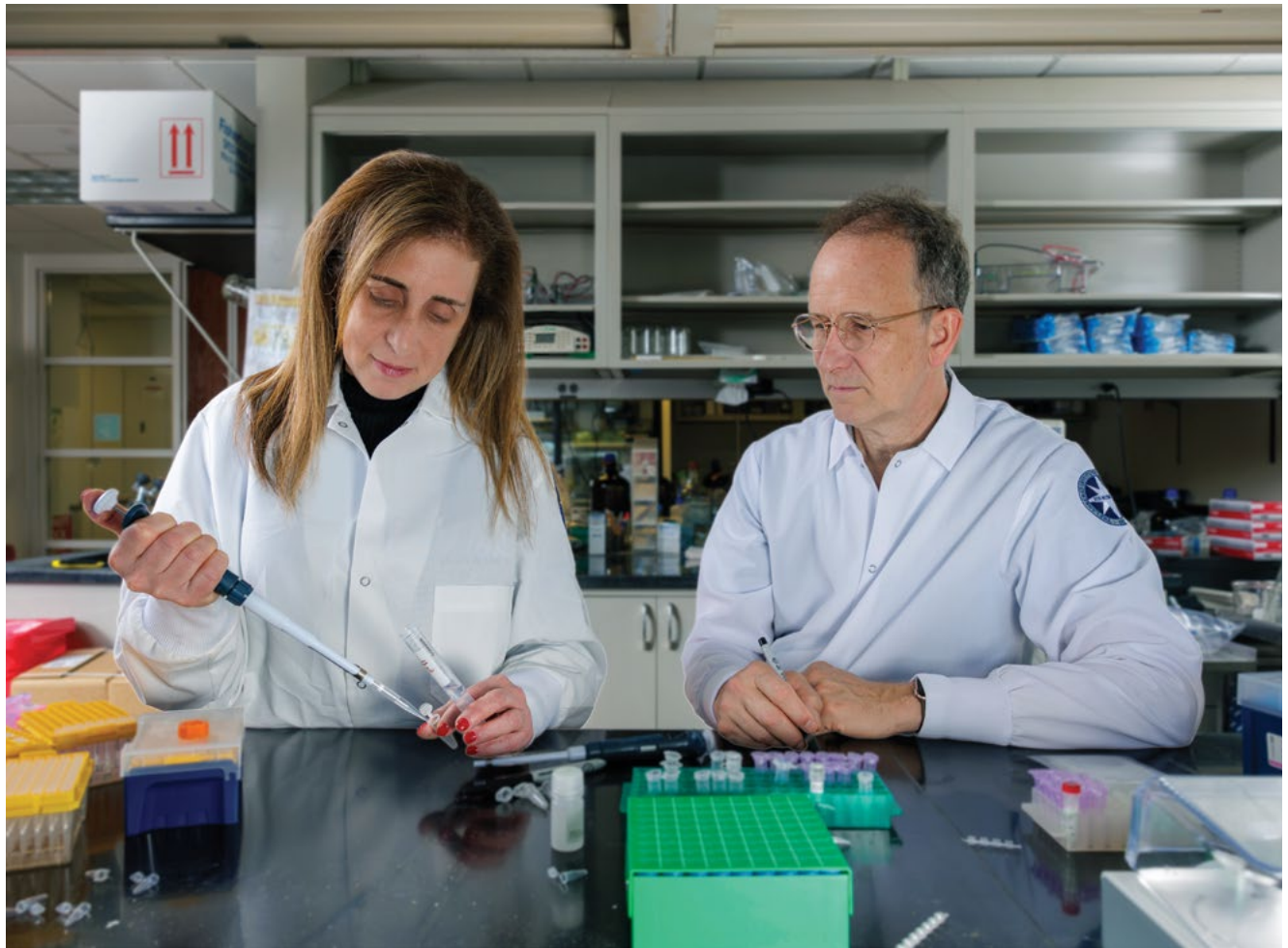
Glenn Radice, MD, comes to us from Brown University with a game-changing concept for recovery from heart attacks. After a heart attack, millions of heart muscle cells die and are

replaced by scar tissue, leading to reduced heart function and heart failure. He is focused on developing a therapy that would modify cell-to-cell junctions in the border zone around injured heart tissue, promoting the regeneration of new, healthy cardiac cells. He has already seen remarkable success in the preclinical environment, and LIMR's expertise in preclinical drug discovery and development will spur his work.

We also present plans for another game-changer — a new Center for Cardiovascular Disease Prevention. We seek to leverage Lankenau Heart Institute's internationally renowned excellence in cardiac care to treat patients before a heart attack occurs. With Main Line Health's advanced imaging capabilities, clinical expertise and research, we are well-positioned to make strides in that area. Working with Lankenau Heart Institute, we have already taken the concept into the community through the Lankenau Initiative to Improve Cardiovascular Access, an initiative dedicated to helping medically underserved patients avoid repeat cardiac events by addressing the personal and environmental factors that impact their health.

Lastly, I'd like to point to an article reflecting continued advances in cancer. In a new clinical trial run locally by LIMR, Main Line Health is one of only four health systems in the country selected to join the PROPEL Registry — a national clinical trial evaluating a promising way to destroy tumors without surgery. The Aliya® Pulsed Electric Field System uses electric pulses that open microscopic pores in cancer cells — destroying them while sparing nearby healthy tissue. I believe this type of local therapy to eradicate cancers, which can spare patients from the typical side effects from systemic care, has an enormous future in the field of oncology therapy.

I hope you enjoy this issue. ✨



Dr. Amy Rosenfeld and Dr. Scott Dessain examining prevaccine samples of polio RNA.

New LIMR researcher works to close the door on polio

FOR MOST, POLIO IS A RELIC OF THE PAST. BUT THE FINAL KNOCKOUT REMAINS ELUSIVE.

For most, polio is a relic of the past. Public memory is largely confined to the image of President Franklin D. Roosevelt in a wheelchair and the legendary work of Drs. Jonas Salk and Albert Sabin. Salk's injectable inactivated poliovirus vaccine (IPV) and Sabin's oral vaccine (OPV), which uses a weakened infectious virus, fueled a global campaign that nearly eliminated paralytic poliomyelitis, marking one of the 20th century's greatest public health triumphs.

Despite this success, the final knockout remains elusive. A case in New York City as recently as 2022 and the continuous isolation of virus overseas, including in Finland, Germany, Great Britain, Poland and Spain, highlight two key weaknesses in how we currently fight polio: the injected

vaccine doesn't prevent the virus from spreading from one person to another and, in rare cases, the oral vaccine can take on a form capable of causing disease. As the collective memory of 1950s paralyzed children and iron lung wards fades and public health policy focus shifts toward the individual over the community, the scientific community remains on high alert for the return of epidemic paralytic poliomyelitis. The hard reality is that without new innovations, our existing tools may not be enough to finish the job.

Researchers Amy Rosenfeld, PhD, who joined Lankenau Institute for Medical Research (LIMR) in early 2026 after serving at the U.S. Food and Drug Administration, and longtime LIMR faculty member Scott Dessain, MD, PhD,

are working to provide the missing tool in this fight. By addressing why poliomyelitis has remained so difficult to eliminate, they are seeking a solution that goes beyond the poliovirus — developing a treatment with the potential to be effective against numerous other viral threats as well as polio.

Born to be a scientist

To say Dr. Rosenfeld was born to be a scientist may be an understatement. Both of the St. Louis-born researcher's parents were biochemists. Some of her earliest memories are from age 3½, when she dressed in party clothes on family day to visit her father's lab at General Foods, where he had pioneered bacterial decaffeination of coffee foods. In her mom's lab, she recalls, she learned how to use a centrifuge to separate components of a mixture.

"I excelled in science and math," she says. "So in my senior year of high school, I had the opportunity to have my own lab at Hoffman-La Roche, a pharmaceutical company in northern New Jersey. I had my own little lab on the sixth floor, and I went back every year in college."

She wound up at Columbia University, where she was interested in microbiology but, despite serving as his graduate assistant, had no inclination to take the advice of

many to collaborate with Vincent Racaniello, PhD, on his groundbreaking poliovirus work. Just before graduation, everything changed.

"At the end of earning my PhD, he went on vacation for six weeks and I finished some experiments he was doing," Dr. Rosenfeld says. "It turned out I liked them after all, and I took over his experiments. That's been the focal point of my research ever since."

The obstacles to eradication

Each vaccine has a flaw that allows poliovirus to lurk and outbreaks of paralytic disease to remain a threat, Dr. Rosenfeld says. Salk's IPV produces weak intestinal immunity, meaning vaccinated people can still become infected in the gut and shed virus. Sabin's OPV is an infectious weakened strain that stops transmission effectively, but on rare occasions, reverts and triggers vaccine-derived outbreaks. In fact, its ability to revert is why OPV is no longer administered in the U.S.

In recent years, Dr. Dessain has made a name for himself in the field. His LIMR lab cloned human antibodies that have been adopted by the World Health Organization as a crucial part of its goal to standardize vaccine manufacturing. These antibodies are now used as the global standard for quality-control testing of all IPV's worldwide.

His next planned step was to use spirulina — a blue-green algae known best as a superfood eaten in space by astronauts — as the delivery vehicle to attack polio, genetically modifying it to release antibodies after digestion.

However, Dr. Rosenfeld told him, there is a better way to use spirulina, and they are now working together on the project and have received two years' funding from the PATH Foundation. The idea is to infuse the spirulina with virus-like particles, which are structures composed of viral proteins. The particles mimic the proteins in appearance but lack genetic material, making them safe for humans.

"When you ingest this biologic it gets absorbed in your gut, the site of virus infection, and you can elicit the protection that IPV doesn't give you," Dr. Rosenfeld says. "And you can avoid the paralysis that can occur if OPV gets in."

Dr. Dessain is enthused by the approach. "LIMR has spent considerable time working with spirulina," he says. "It's promising not only because of how it works but because it would be relatively inexpensive compared to other vaccine candidates for delivery."



Dr. Amy Rosenfeld (front) works with medical student Jena Dessain.

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COVER STORY

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A promising path

The economics of the pharmaceutical industry are far different today than in the days of Drs. Salk and Sabin, Dr. Rosenfeld says. They had the scientific freedom to develop their respective poliovirus vaccines as a public good, with funding provided by the National Foundation for Infantile Paralysis (March of Dimes). In that era, methodologies and viruses were donated to pharmaceutical companies for production. Today, companies might not find it financially feasible to develop a single-purpose biologic.

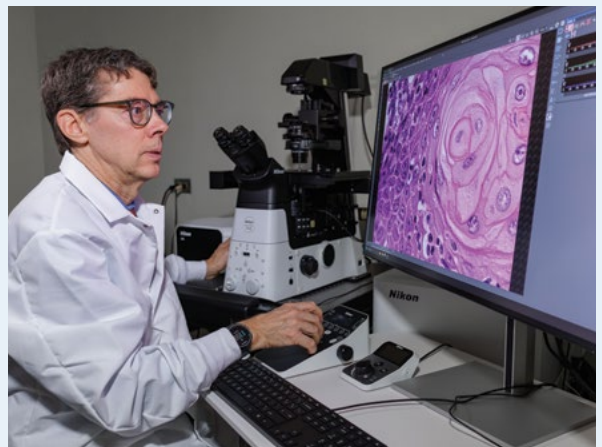
However, Dr. Rosenfeld notes that what works for poliovirus should also work with a subset of known enteroviruses that tend to produce mild symptoms as well as viruses like rotavirus and norovirus, common causes of diarrhea. Other potential targets for this platform could include major gastrointestinal conditions such as Crohn's disease and *H. pylori* infections.

Dr. Rosenfeld and Dr. Dessain are currently working on developing preclinical models of the biologic. They also need to determine how to track who is infected and who is not once it can be tested in humans.

Dr. Rosenfeld may have had no interest in polio originally, but at this stage in her career, she believes elimination of paralytic poliomyelitis may be within reach. "It's an exciting possibility," she says. ✨



Examining viral polio plaque.



Researcher seeks new muscle, not scar tissue, after heart attack

What if patients could recover after a heart attack with cardiac muscle that's brand new rather than scar tissue?

Glenn Radice, PhD, who joined Lankenau Institute for Medical Research (LIMR) earlier this year, is focused on research that could lead to treatments enabling patients to regenerate cardiac muscle rather than form scar tissue after heart attacks. His promising preclinical results suggest that this approach could improve long-term heart function after an attack.

Under a microscope, the effects on the cellular level of a heart attack survivor present a stark picture. Millions of heart muscle cells die and are replaced by fibrotic (scar) tissue, leading to reduced heart function and heart failure.

Dr. Radice's research centers on how heart muscle cells adhere to one another. Cells stick to each other using proteins called cadherins and their associated proteins, which provide the structure that links the cell's outer surface to an internal support framework (cytoskeleton). This anchoring helps keep tissues strong and stable.

Dr. Radice's hypothesis focuses on modifying specific cell-to-cell connections in the surviving muscle surrounding the injured tissue to stimulate heart regeneration, potentially leading to improved treatments for heart attack patients. He aims to understand how cytoskeletal linker proteins regulate heart growth to develop therapies that promote new muscle growth after injury, potentially enhancing heart recovery.

"A turning point in my career was discovering that modifying muscle cell contacts improved heart function in a mouse model. With our new preclinical models, we aim to clarify how the body's internal mechanical signals regulate heart muscle growth," says Dr. Radice, who holds a four-year, \$2.3 million grant from the National Heart, Lung, and Blood Institute. ✨

Center for Cardiovascular Disease Prevention: A game-changer on the horizon

LIMR RESEARCHERS BELIEVE THEY CAN IDENTIFY EARLY CARDIOVASCULAR DISEASE BEFORE A HEART ATTACK OCCURS.

With cancer, physicians use the very DNA of our existence to try to prevent advanced stages of disease — testing for genetic mutations such as the BRCA1 biomarker for elevated breast cancer risk, ordering PSA blood tests to detect risk of prostate cancer, and more.

That same approach, however, has not taken hold with heart disease. At Main Line Health, led by Lankenau Institute for Medical Research (LIMR), clinicians and researchers are initiating an effort to change the paradigm.

LIMR is moving toward launching a new Center for Cardiovascular Disease Prevention. The center would build on the robust pillars already in place at Main Line Health — a program of advanced cardiac imaging, clinical expertise and prolific basic research — to identify early cardiovascular disease and prevent a serious event before it can occur.

“Unfortunately, people often don’t know they have heart disease until they’re in the back of an ambulance,” says George Prendergast, PhD, President and CEO of LIMR.

“We believe a systematic approach is attainable to determine if patients have plaque building up in their artery walls and treat it before they need bypass surgery or suffer a heart attack. We believe this path will be a game-changer.”

Main Line Health is at the forefront of imaging capabilities, offering the latest in dual-source CT scanners. It also conducts coronary artery calcium scoring as a screening

tool for asymptomatic individuals. Furthermore, using Heartflow FFR_{CT} technology, clinicians can not only get a real-time 3D view of how well blood is flowing through the coronary arteries, but can also analyze the plaque in the arterial walls to determine if there are blockages affecting blood flow, a disease called atherosclerosis.

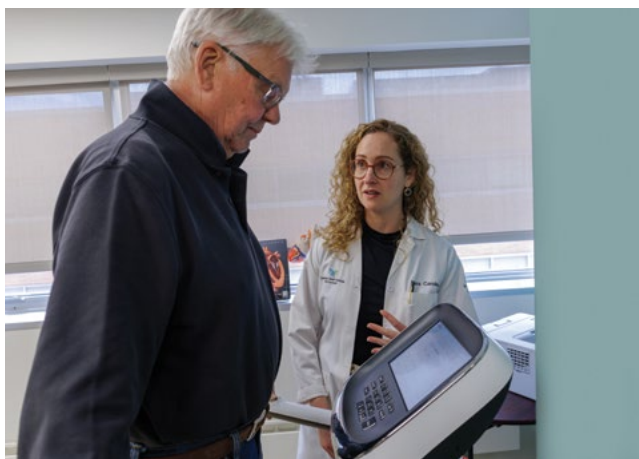
“Just as in the world of cancer, we’re in a position to understand what drives atherosclerosis,” says Thomas Phiambolis, MD, director of CT Angiography, Lankenau Heart Institute. “With a philanthropic effort to obtain a photon-counting CT scanner to improve our visibility even further and to bring on elite researchers, LIMR can drive preventive cardiovascular disease medicine into unprecedented areas.”

LIMR has ties to a leading collaborator in this innovative research into atherosclerosis. It also will build on the foundation of in-house world-renowned experts, including Peter Kowey, MD, William Wikoff Smith Chair in Cardiovascular Research.

Interventional cardiologist Mara Caroline, MD, is heading up the Lankenau Initiative to Improve Cardiovascular Access (LIICA), which is dedicated to helping medically underserved patients avoid repeat cardiac events by addressing personal and environmental factors that impact their health. A multidisciplinary team addresses barriers including insurance, medication access, transportation and lack of healthy food (in part with produce grown at Lankenau Medical Center’s Deaver Wellness Farm).

A pilot study in collaboration with LIMR found that LIICA participants made meaningful improvements in cholesterol levels and lowered their average blood sugar. Readmission rates at 30 days were only 2%, far lower than national averages of 6-8%.

“We have a diverse population, including those who have the best private insurance and those who do not,” Dr. Caroline says. “I see them every day in my practice. If they could come in for preventive care because we’ve identified risk factors earlier, not because they’ve had a heart attack, it would change the course of their disease.” ✨



Dr. Mara Caroline talks to patient Steve Welch about data from the InBody scale, which measures body fat, muscle mass and water, not just weight.

Expanding what's possible for patients with complex valve disease

Lankenau Heart Institute, working with Lankenau Institute for Medical Research (LIMR), this year became the only center in the region offering clinical trials for minimally invasive treatment of severe aortic regurgitation — bringing next-generation therapies to patients who previously had limited options beyond open-heart surgery.

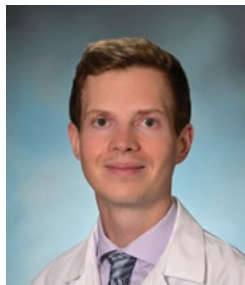
In aortic regurgitation, the aortic valve does not close tightly, allowing blood to leak backward into the heart and gradually forcing it to work harder. Over time, patients may develop fatigue, shortness of breath and reduced heart function.

Through Lankenau Heart Institute's collaboration with LIMR, we are now advancing two landmark trials that are helping define the future of valve care:

- **ALIGN-AR** – evaluating transcatheter aortic valve replacement (TAVR) using the JenaValve Pericardial™ system, a minimally invasive option designed specifically for patients with severe aortic regurgitation
- **ARTIST** – comparing TAVR with the JenaValve Trilogy™ system against traditional surgical aortic valve replacement, helping define new standards for treatment

And this momentum extends beyond the aortic valve. Lankenau Heart Institute and LIMR continue to lead in transcatheter mitral therapies, offering one of the most experienced programs in the country and the largest regional inventory of advanced devices, including participation in the APOLLO trial for transcatheter mitral valve replacement.

Magouliotis researching how AI can advance heart treatment



Dimitrios Magouliotis, MD

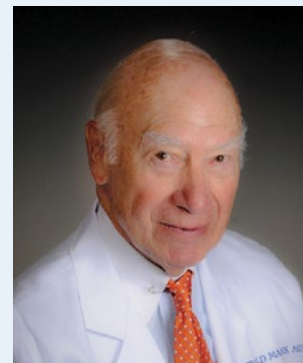
Research Assistant Professor Dimitrios Magouliotis, MD, PhD, MBA, MSc, published two articles exploring how artificial intelligence (AI) can be used to advance the treatment of heart disease.

Dr. Magouliotis was senior author of a review in the *Journal of Personalized*

Medicine examining how AI can improve the detection and management of high blood pressure — using tools that analyze patterns in patient data, medical images and clinical notes to better identify who is at risk and ensure they receive appropriate treatment. The review also flags real-world obstacles to putting these tools into practice.

He was also senior author of an article in *Life* journal reviewing how AI is being used throughout the entire process of adult heart surgery — helping doctors detect disease earlier, plan procedures more precisely and catch potential complications before they become serious. Despite promising real-world results, the article notes, wider adoption is held back by gaps in research quality and regulatory challenges.

Dr. Magouliotis is presenting original research on AI-based operative mortality prediction in aortic surgery at the International Society for Minimally Invasive Cardiothoracic Surgery annual meeting in Miami in June.



PASSING OF A LEGEND — Gerald J. Marks, MD, a revered surgeon and mentor, passed away on January 31 at age 100. Dr. Marks was a longtime Lankenau Medical Center surgeon and member of the Lankenau Institute for Medical Research (LIMR) faculty who dedicated his life to advancing colorectal surgery. He pioneered procedures that have shaped the field and transformed patient outcomes. The father of internationally known colorectal surgeon and LIMR Professor John Marks, MD, he worked with Dr. Mohammed Mohiuddin to develop a revolutionary approach to improve the outcomes for patients with rectal cancer, delivering radiation before surgery and performing a new surgical approach to preserve the anal sphincter. The Marks-Mohiuddin method has allowed 93 percent of Lankenau Medical Center's patients to avoid a colostomy bag, well below the national average.

Next-generation cancer trial puts Main Line Health on national stage

At Main Line Health, clinicians and researchers don't work in silos — they partner every day to turn discovery into the most advanced care for patients, or even fulfill both roles themselves.

That marriage is on full display in a new clinical trial for advanced cancer at Lankenau Institute for Medical Research (LIMR). Main Line Health is one of only four health systems in the country selected to join the PROPEL Registry — a national clinical trial evaluating a promising way to destroy tumors without surgery.

This milestone builds on another first: Main Line Health became the first health system in Pennsylvania to offer the Aliya® Pulsed Electric Field (PEF) System using the INUMI™ Flex Needle to perform endoscopic ablation with the Ion™ (Intuitive) robot-assisted navigation system.

The trial is led by LIMR physician-scientists — interventional pulmonologist Thomas Meyer, MD; interventional radiologist Ricky Tong, MD, PhD; and Patrick Ross, MD, PhD, Main Line Health's Department of Surgery chairman. Together, the team has already treated dozens of patients with the Aliya system and is seeing promising early results, especially for patients with limited options. The procedure targets soft tissue cancers, including primary and metastatic lung, liver and other organ tumors.

Ablation isn't new. For years, clinicians have used thermal ablation (destroying tissue with heat) and cryoablation (destroying tissue with extreme cold) to treat tumors that aren't good candidates for surgery or radiation — with varying success.

PEF ablation is the next evolution, powered by a different kind of energy. The system delivers short, high-voltage electric pulses that open microscopic pores in cancer cells — destroying them while sparing nearby healthy tissue. Because it's minimally invasive, clinicians can deliver it bronchoscopically (through the airway) or percutaneously (through the skin).

Through the PROPEL Registry, researchers will collect data from 1,000 retrospective patients nationwide to assess how the technology performs in the real world across a range of



Above: Aliya percutaneous needle. Below: Dr. Thomas Meyer (right) oversees use of the device in an electrical ablation procedure.

Bottom photo courtesy of CBS News Philadelphia

solid tumors. Dr. Meyer uses the tool for patients with primary lung cancer or lung metastases discovered after treatment for colorectal, breast or other cancers. Dr. Tong has used the system percutaneously to treat metastatic disease that has spread to other parts of the body. Dr. Ross will be using the system in thoracic surgery.

By joining the registry, Main Line Health takes the national stage alongside institutions like Penn Medicine, NYU and Duke — while bringing leading-edge cancer care to patients close to home.

“We are still in the early stages of understanding the full potential of this technology, but what we are seeing in our patients is very encouraging,” says Dr. Meyer. “Being part of this national registry means we are contributing to the evidence that will shape how PEF ablation is used across the country — and our patients here at Main Line Health are benefiting from that right now.” ✨

Unique blend of generosity and expertise leads to improved cardiac care access

For nearly 100 years, Lankenau Institute for Medical Research (LIMR) has been well served by generous donors. But as physicians, Laura Bessen-Nichtberger, MD, and Steven Nichtberger, MD, offer something beyond philanthropy: the expertise and resolve to not just fund a program but to build it.

Driven by a generational family history of heart disease, Steven trained as a cardiologist and later became a businessman/entrepreneur; he is now a biotech CEO who has served on the Board of Governors of Main Line Health. Laura trained as an infectious disease specialist who was Head of U.S. Medical at Bristol Myers Squibb before her retirement. She is currently a member of the Board of Governors of Main Line Health.

Those backgrounds led them to partner with leaders at Lankenau Medical Center to provide philanthropic support to launch the Lankenau Initiative to Improve Cardiovascular Access (LIICA) and then to lend their expertise toward ensuring success.

“As we conceived of LIICA, we wanted to ensure we could have a real, measurable impact,” Steven says. “In collaboration with physicians and experts at Main Line Health, we were able to design a program that would identify the right patients and the right interventions and allow for measurement of impact and outcomes from the start. We hoped that by measuring the impact of our philanthropic support, we would inspire others to invest in their hospitals to develop similar programs.”

The concept began with a simple question to interventional cardiologist Mara Caroline, MD: What are Lankenau Medical Center and LIMR, both part of Main Line Health, doing to ensure equity of access to patients in its cardiac program?

The answer was that while every patient receives the same care, patients with fewer resources and more barriers to care tend to wind up in the hospital more often.

In 2023, that discussion resulted in launching a program with a bold goal: to improve long-term cardiovascular outcomes for patients at highest risk after a heart attack — risk driven not by the quality of the medical care they receive, but by the social and economic barriers they face once they leave the hospital.

Within the LIICA program, an interdisciplinary team comprising a physician, advanced practice provider, nurse navigator, community health workers and pharmacists works with each patient to manage clinical risk factors, guide



lifestyle changes and remove obstacles to care.

Over 100 patients who came to Lankenau from high-risk ZIP codes have participated in LIICA. The results are compelling. A 2025 internal study of 67 participants conducted by LIMR showed significantly lower readmission rates and secondary cardiovascular events compared to local and national benchmarks. Notably, 58% reached guideline-directed LDL cholesterol goals, far exceeding national averages after a cardiac event.

“What’s also heartening is when you hear the stories of how we’re impacting people from high-risk families,” Laura says. “These are people who’ve lost multiple siblings, parents, aunts and uncles. They’re getting information on diet, health, exercise, medicine and follow-up and sharing it. But it takes a village to keep a program going.”

The Nichtbergers’ example is creating that village, spurring donations from Diane Lafferty and other philanthropists.

“My husband had three cardiac procedures at Lankenau Medical Center — triple bypass, stents and a pacemaker at various times in his life,” Diane says. “I wanted to support forward-looking, preventive cardiac care programs like LIICA.”

LIICA’s success has Laura and Steven hoping others will follow their example so the program can not only flourish at Lankenau but also serve as an inspiration for broader impact. They are thrilled that George Prendergast, PhD, President and CEO of LIMR, plans for LIICA to be a cornerstone of a new Center for Cardiovascular Disease Prevention (see page 5).

“It’s great to see LIMR using LIICA as the catalyst for even greater initiatives,” Laura says. ✨

Your investments in research at LIMR can have a significant impact

You can designate one of the following funds to direct your contributions and support research that is important to you.



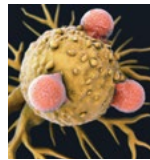
Biotechnology Innovation Fund

This fund supports work on biological molecules engineered by LIMR scientists that can enhance the diagnosis, prognosis and treatment of disease. Your generous contributions to this fund can help advance the work of our researchers including our studies on targeted nano-carrier therapeutics as experimental treatments for cancer and our work on cloned human antibodies as treatments for infectious disease, cancer and neurological illnesses.



Cardiovascular Breakthrough Fund

Cardiovascular disease accounts for nearly 800,000 deaths in the United States every year, or about one of every three deaths. Additionally, about 92 million American adults are living with some form of heart disease or the aftereffects of stroke. LIMR is home to world-renowned cardiovascular researchers. Your gift to this fund will further research that could benefit the lives of millions of heart disease and stroke patients.



Immunotherapy Pioneer Fund

Immunotherapy entails the prevention or treatment of disease with substances that manage the immune system's capabilities to clear disease rather than attack the disease itself. LIMR has spearheaded unique studies of disease modifier pathways that impact immunity and cancer progression, developing new drugs to target them. Your generous contributions to this fund will help us to continue to advance these innovative directions.



Regenerative Medicine Vision Fund

Regenerative medicine deals with new processes of replacing, engineering or regenerating human tissues to restore or establish normal function. LIMR is privileged to have one of the pioneers in regenerative medicine, Professor Ellen Heber-Katz, PhD, who has discovered an experimental drug approach that may eliminate a need for stem cell transfer. Your contributions to the Regenerative Medicine Vision Fund will help further her research.

Support Research Highlighted in This Issue

- **Lankenau Institute to Improve Cardiovascular Access** to identify and mitigate barriers to care for medically underserved patients with cardiovascular disease

LIMR Unrestricted Fund

Unrestricted gifts to LIMR enable opportunities to target your gift where our doctors and scientists believe it can have the greatest impact.

To make a donation, please use the reply envelope inserted in this publication, or donate online at limr.org (click on Giving). You may also call Katie Beddis of the Lankenau Medical Center Foundation at 484.476.8067, or email her at beddisk@mlhs.org.

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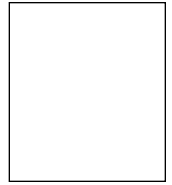
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ABOUT MAIN LINE HEALTH

Main Line Health® is a not-for-profit health system serving the Philadelphia region and beyond. Main Line Health consists of five hospitals, seven health centers and over 150 medical practice locations. The System has more than 14,000 employees and over 2,100 employed and independent physicians and advanced practice providers. At its core are four of the region's most respected acute care hospitals as well as one of the nation's premier facilities for rehabilitative medicine. Main Line Health also includes a treatment center for drug and alcohol recovery; skilled home healthcare and hospice; Main Line Health Centers, primary and specialty care, lab and radiology and other outpatient services; and a biomedical research organization.