

Lankenau

Leaders

Volume 9 Issue 1 Fall 2014



BRING YOUR HEART TO LANKENAU





Lankenau Medical Center Foundation

100 E. Lancaster Avenue, Medical Office Building East, Suite 564, Wynnewood, PA 19096 484.476.8101

www.mainlinehealth.org/LMCGiving

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Lankenau Leaders

Editor: Brittany Thompson
Special thanks to: Dianne Baker, Carol Cutler, Patti Giambuzzi, Kyle Kramer, Shaun Moran, Phil Robinson, Charlene Starankovic, and Mary Ann Wertan
Design: 21XDESIGN
Photography: Jeff Fusco
Contributing Photographers: Bob Coldwell, Joseph Henken, Robert Neroni, and Edward Savaria

Lankenau Medical Center Development Team

Kenneth E. Kirby
Senior Vice President,
Development,
Main Line Health
KirbyK@mlhs.org
David L. Phillips, Ed.D.
Executive Director
of Development,
Lankenau Medical Center
PhillipsDa@mlhs.org
Carolyn S. Goldman
Director of Development
Campaigns
GoldmanC@mlhs.org
Gregory H. Reif
Associate Director
of Development
ReifG@mlhs.org
Christine Donovan
Development Assistant
DonovanC@mlhs.org

Lankenau Medical Center
Foundation
100 E. Lancaster Avenue
Medical Office Building
East, Suite 564
Wynnewood, PA 19096
484.476.8101
[www.mainlinehealth.org/
LMCGiving](http://www.mainlinehealth.org/LMCGiving)

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Letter from the President



IN DECEMBER 1953, the doors to the long-awaited "new" Lankenau – a state-of-the-art hospital built on the rolling hills of the former Overbrook Golf Club – finally opened. Incorporating a new way of thinking and featuring high tech equipment – some of which was the first in the nation – the new facility at its third site in its history was hailed as the hospital of the future. As you'll read in *From the Archives*, (page 20), even

President Dwight D. Eisenhower sent his congratulations on such a remarkable achievement.

Sixty years later, in 2013, we once again built what I believe is a facility "of the future" - the Heart Pavilion at Lankenau Medical Center. This special "heart-related" double-issue of *Lankenau Leaders* celebrates this historic facility as well as our advanced cardiovascular services – one year from the Heart Pavilion's Grand Opening and the launch of our new Main Line Health system-wide cardiovascular services brand: *Lankenau Heart Institute*. Through the work of our system hospitals – Lankenau, Bryn Mawr, Paoli and Riddle – and our network of community cardiology practices, the Lankenau Heart Institute has been firmly established as one of the top-performing cardiovascular medicine and surgery programs in the country.

As a result of so much to celebrate, the past year has been rich with events, including the *Heart of Lankenau* dinner series, *Heart Pavilion Exclusive Preview Dinner*, *Grand Opening* event, *Heart of the Neighborhood* festival, *Visionary Celebration* dinner and much more! When I see the faces of so many of our community members, volunteers, leaders, friends and benefactors in the photos from these events, I am reminded of their generosity and how

grateful I am for the warm friendships of everyone in the Lankenau family and their tireless dedication to our institution.

Lankenau Medical Center has a rich history of providing superior cardiovascular care to its community and beyond. As a result, people "bring their hearts" to Lankenau from across the nation and around the world. But what makes Lankenau truly special is the "heart" that our entire team – including physicians, nurses, therapists, administrators and support staff – brings to our institution every day. Patients and staff alike can truly claim they bring their hearts to Lankenau and are better for it.

I firmly believe truly enriched health care services must reach beyond the consideration of patient care in a clinical setting. Institutions at the forefront of our industry, like Lankenau Medical Center, must be leaders in innovative research and medical education that support, inform and enhance patient care,



enabling them to be truly superior. I am proud of our distinguished legacy of cardiovascular research which you can read about in *A Rich Legacy of Research* (page 30). I am also grateful for the generous commitment of Lankenau benefactors who, over the years, have provided funding support, either for equipment or to establish endowments for educational programs, such as our Cardiovascular Fellowships as described in *Learning to Listen* (page 48).

In recent years, the cardiovascular team at Lankenau has had several major milestones that only serve to motivate us to set the bar even higher. As in all

Lankenau Leaders issues, under *Awards and Recognition*, I proudly present our most recent accolades, including *U.S. News and World Report's* ranking of Lankenau Medical Center as one of the top five hospitals out of nearly 100 in our region. Additionally, *100 Lives Changed Forever* (page 50) and *Beyond the Blue Drapes* (page 44) speak to more specific achievements such as our successful implementation of a complex Transcatheter Aortic Valve Replacement program and Dr. Francis Sutter's landmark 1,000th robotic-assisted CABG (coronary artery bypass graft) surgery.

It's often been said that Lankenau Medical Center is a hidden gem, tucked away in the western suburbs just beyond Philadelphia's city limits. But in the past few years our community, greater region and nation have taken notice and are realizing just what a consequential presence we have in health care in our region and beyond. Lankenau is a leading

gratitude. There is no way we could be where we are today without our donors. I continue to be amazed at the level of commitment that our community has to Lankenau. As our Chairman of the Lankenau Medical Center Foundation, Alfred W. Putnam, Jr. stated at our opening ceremonies: "Health care is part of your life and you invest in an institution that you think will be there for you." Lankenau is indeed *that* institution, and dedicated friends have helped to ensure our growth so that we can be the hospital of the future over and over again, for generations to come.

There are tales of remarkable generosity and investment in Lankenau Medical Center throughout the following pages. Many are listed in *Focus on Philanthropy* (page 58), and major commitments from our own physicians are highlighted in *Introducing the 1860 Society* (page 68). Underlying our cardiovascular achievements is a strong foundation built on



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institution, and the Lankenau Heart Institute is a leading cardiovascular program. We are investing in emerging specialties as *Building a Cardio-Oncology Program* (page 34) describes. We're offering programs to keep our patients out of the hospital, which you can read about in *A Lifestyle Intervention* (page 42). We're focused on treating each patient as a unique individual with distinct personal and medical needs, including developing a strong *Women's Heart Initiative* (page 40) program – a sub-specialty often overlooked.

Last, but definitely not least, I will end on a note of

philanthropy and our community's desire to invest in Lankenau. I am humbled by each and every charitable gift Lankenau receives, whether a \$20 annual fund contribution or a \$2 million Endowed Chair. They all come from the same "heart" – that of a grateful community member.

Sincerely,


Phillip D. Robinson, FACHE
President, Lankenau Medical Center






THE HEART





This magnificent building has been the topic of conversation for the past four years since construction began, and for ten years before that, as it was carefully designed. But what is the Heart Pavilion? What does it offer to patients and their families who entrust their care to the

PAVILION



team at Lankenau Medical Center? The following pages will dive deeper into this unique facility and its role in transforming the way we manage and treat heart disease by fostering collaboration among patients, families and health care providers.

LEVEL 4:

- Intensive Care Unit (ICU) and Coronary Care Unit (CCU) for inpatients requiring intensive medical treatment
- Family Lounge

LEVEL 2:

- 32-bed Medical Surgical Step-Down Unit for inpatients requiring specialized observation and interventions
- Family Lounge

LEVEL 1:

- 32-bed Medical Surgical Telemetry Unit for inpatients requiring continuous monitoring
- Public access to existing Hospital buildings through the 1860 Society Connector
- Brodsky Bridge access between Heart Pavilion and visitor parking garage D
- Information Desk

MEZZANINE LEVEL:

- The outpatient offices of the Lankenau Heart Group – the multidisciplinary team comprised of cardiologists, cardiac surgeons, vascular specialists, and specially trained nurses and technologists who work collaboratively to deliver superior patient-centered care
- Piano Lounge
- Information Desk

STREET LEVEL:

- The Lankenau Heart Institute's state-of-the-art Cardiovascular Imaging Center providing screening and diagnostic services such as echocardiography, stress testing, nuclear medicine and many more
- Information Desk
- A la carte food and beverage station
- Exterior tranquility garden



“We wanted to build
But the building alone
make the difference.
the capability of the

Jack Lynch,

Design (LEED) certified at the Silver level, recognizing it internationally as a green, high-performance building.



Heart Pavilion



Lankenau Heart Institute
Main Line Health

a facility that rivaled advanced, world-class care.
can't help or cure anybody – it's our people who truly
We are proud to have a facility that now matches
individuals who work inside.”

President & CEO, Main Line Health

80% - more than 2,500 tons - of all construction debris from the Heart Pavilion was recycled and saved from the landfill.

“This facility, the way it’s designed, the way it’s staffed, the way the delivery of care occurs only enhances the patients’ experience. It makes them feel more welcome. It makes them feel more secure. It lends to the healing that we’re trying to provide.”

*Frank C. McGeehin, III, MD,
Chief, Clinical Cardiology,
Main Line Health*



The Heart Pavilion has a 53% reduction

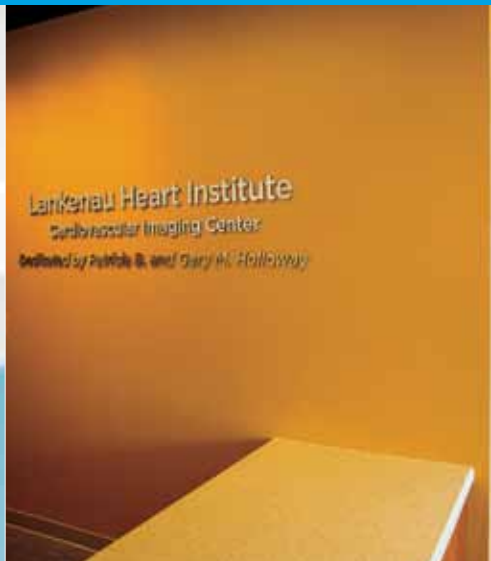


in water use compared to a code-compliant building. 1.7 million gallons are saved annually – enough water to supply 50 homes for one year.



Thanks to conscientious design and efficient lighting, energy consumption in the Heart Pavilion is approximately 10.2% below that of a code-compliant building and 25% less per square foot than the national average.





More than 1,000 new trees were planted on the Lankenau campus during construction.





“This new building is the culmination of over 150 years of care at Lankenau, and it symbolizes our commitment to the present and specifically to the future.”

- Erin O'Malley Tysko, MD, Cardiologist, Lankenau Heart Group

Lank

Hear



Interior furnishings and finishes in the Heart Pavilion help maintain healthy indoor air quality for patients, staff and visitors through low content of volatile organic compounds.





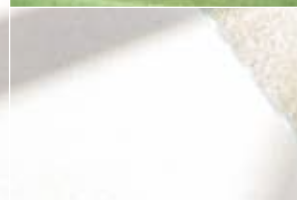
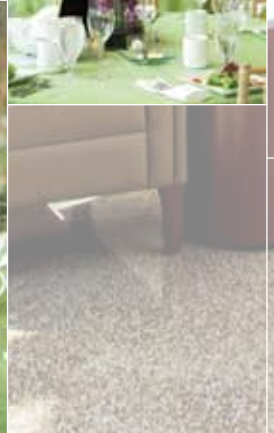
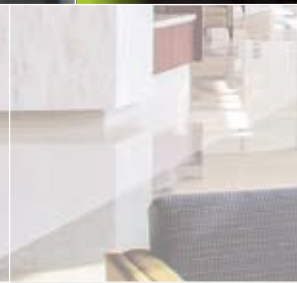
“Our primary focus has always been to keep our communities healthy, and from this project’s beginning, we’ve carried through with that mission. Whether it’s by conserving water and energy, or by providing the highest quality medical care, our commitment to the community and to our patients is our number one priority. We’ve created a building that offers innovation and design as the cornerstone of sustainability.”

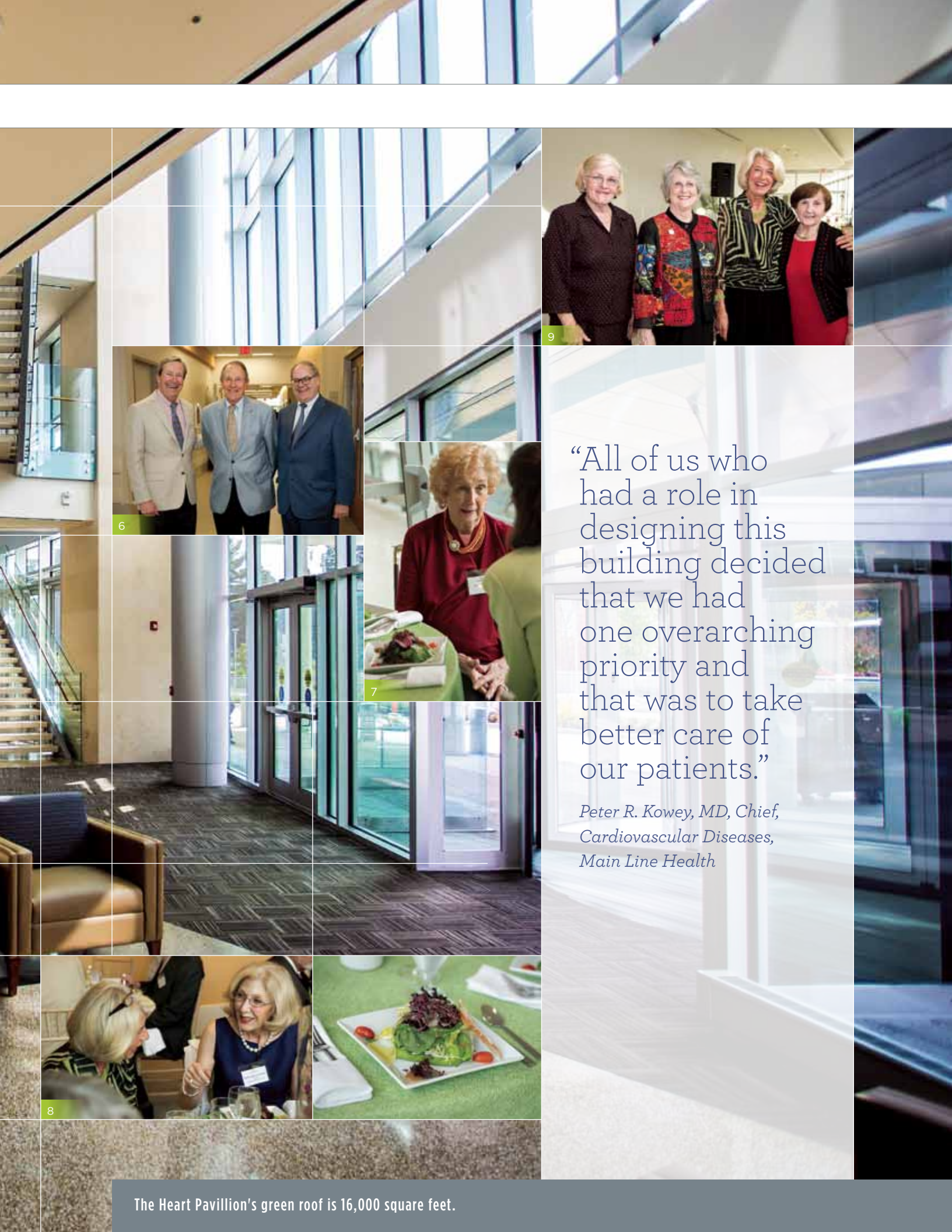
*- Phil Robinson, President,
Lankenau Medical Center*

Exclusive Preview Dinner

On June 12, 2013, donors of more than \$100,000 to the Campaign for Lankenau Medical Center's Master Facility Project attended the exclusive *Heart Pavilion Preview Dinner*. Guests were treated to an insider tour of Lankenau's new building before it opened to the public. Speakers remarked on the scope of the transformational project, the more than \$21 million raised so far in new philanthropy, and the importance of this long-awaited facility to Lankenau's cardiovascular program.

1. Jack Lynch, President & CEO, Main Line Health (MLH); Phil Robinson, President, Lankenau Medical Center (LMC); and Wistar Morris, Trustee, LMC Foundation
2. Morris and Nancy Antar; and Jack Lynch
3. Guests were the first to tour the Heart Pavilion and its spacious private patient rooms before it opened to the public.
4. Russell Palmer chats with Mike Buongiorno, EVP and CFO, MLH
5. Peter Havens, Trustee, LMC Foundation and MLH; and Francis P. Sutter, DO, Chief of Cardiac Surgery, LMC
6. George W. Gephart, Jr., Chairman of the Board, MLH; Wistar Morris; and Alfred W. Putnam, Jr., Chairman, LMC Foundation
7. Joyce Moriarty
8. Mary Louise Schall, LMC Women's Board member; and Barbara Mozino Seegul, Trustee, LMC Foundation
9. LMC Women's Board members Peg Cristofalo; Alice Chase, immediate past president of the Women's Board; Mary Louise Schall; and Barbara Scorzetti, Ladies Aid Society Auxiliary President





“All of us who had a role in designing this building decided that we had one overarching priority and that was to take better care of our patients.”

Peter R. Kowey, MD, Chief, Cardiovascular Diseases, Main Line Health



The Heart Pavillion's green roof is 16,000 square feet.

The Grand Opening

THE DAY HAD FINALLY COME. On July 25, 2013, Lankenau Medical Center debuted the all-new five-story, 274,000-square-foot Heart Pavilion.

Hundreds of community members, representatives of local organizations, public officials, patients and their families, trustees, benefactors and friends from across the region, as well as a host of Lankenau and Main Line Health physicians and staff, gathered for the grand opening ceremonies.

In conjunction with the building opening was the unveiling of the new cardiovascular services brand – the Lankenau Heart Institute (LHI) – whose world-class cardiologists, cardiovascular surgeons and subspecialists are now located in the Pavilion. Lankenau Heart Institute offers patient-centered and comprehensive cardiovascular care that integrates the latest prevention, diagnostic, treatment, rehabilitation and chronic disease management services.

1. *The Honorable Mary Jo Daley, Pennsylvania Representative; and Jason Arbacheski, Main Line Health (MLH) development staff member*

2. *Lankenau Medical Center (LMC) employees wore special t-shirts for the occasion which said “I bring my heart to Lankenau.”*

3. *Henry Sawin, MD; and Donald Callaghan*

4. *Seven employees and volunteers were chosen to participate in the ceremony, representing the entire LMC team and the varied roles which are vital to providing superior care for Lankenau’s patients.*

5. *Mike Morris; and Annette and Chuck Pennoni*

6. *Employees across Main Line Health were invited to the Grand Opening ceremony.*

7. *Speakers at the event included Jay W. Siegfried, MD, President, Lankenau Medical Staff; Phil Robinson, President, LMC; Alfred W. Putnam, Jr., Chairman, LMC Foundation Board; Lynn Sherr;*





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Peter R. Kowey, MD, Chief, Cardiovascular Diseases, LMC; Jack Lynch, President and CEO, MLH; Scott M. Goldman, MD, Chairman, Department of Surgery, MLH; and George W. Gephart, Jr., Chairman, MLH Board of Governors (not pictured). **8.** Guests enjoyed food and live music as they toured the Heart Pavilion. **9.** Mistress of Ceremonies was Lynn Sherr, award-winning broadcaster and author, former correspondent with ABC Newsmagazine 20/20, and Lower Merion native. **10.** Penny Weiner, Debbie Fine and Drew Milstein **11.** At the Grand Opening, the new Lankenau Heart Institute identity was unveiled. **12.** Peter Havens, Trustee (center), LMC Foundation and MLH and Chairman, LIMR Board and Chairman's Campaign Council.

The Heart of the Neighborhood



THEN

The first ever “Lankenau Day” was held in 1944 when Lankenau Hospital was located at Girard and

Corinthian Avenues in Philadelphia. This spring festival was a Pennsylvania Dutch-style fair with booths lining the halls of the buildings and sidewalks in front of Lankenau’s School of Nursing, drawing crowds from the local area.

When the Hospital relocated to its present site in 1953, “Lankenau Day” became a project of the newly-formed Women’s Board and continued as

the Women’s Board then made another incredible contribution. “It was our pleasure to make a \$1 million pledge to support and dedicate the Breast Center,” says Women’s Board immediate past president Alice Chase. “It seemed fitting that we support the evolution of a space that was the home base of the Women’s Board for so many years.”

NOW It had been a while since the Lankenau Days of years past. But 2013 brought with it a monumental moment in the history of Lankenau Medical Center – the opening of the eagerly anticipated Heart Pavilion. “We wanted to share our excitement with community



Above: Photos from “Lankenau Day” in the 60s and 70s.

Above center: “Impressions of the Lankenau Fair” by artist Emma “Deanie” Miller; assisted by Barbara Davis; completed in 1971.

a successful event for many years, raising money to support programs and services benefiting Lankenau’s patients. Every year, each of the Women’s Board auxiliaries maintained a booth at the fair as one of their fundraising activities. In 1971, Women’s Board member Emma “Deanie” Miller captured the spirit of this neighborhood festival in a mural on the wall of the Women’s Board Room, commemorating this important fundraising project and community social event.

The Women’s Board Room was eventually renovated to become part of an all new Comprehensive Breast Center – part of Lankenau’s Master Facility Project. The mural was photographed one last time before becoming encased within the walls. As if sacrificing their mural wasn’t enough,

members and welcome them to our campus for a day of sheer enjoyment, just as the spring fairs used to,” says Lankenau President Phil Robinson.

And so, on September 27, 2013, in celebration of the Grand Opening and launch of the new brand - the Lankenau Heart Institute – gourmet food trucks, carnival rides, street performers and live music descended on Lankenau’s campus for the *Heart of the Neighborhood* festival. Thousands of patients, families and local residents took part in the fun-filled day of activities and received free health screenings and health information. For many, the Ferris wheel – a staple of the original “Lankenau Day” celebration – brought fond memories of days gone by.



From the Archives: The Hospital of the Future

IT WAS A CLEAR DAY BUT BITTERLY COLD. ESCORTED BY POLICE, A PROCESSION OF AMBULANCES SLOWLY MADE ITS WAY THROUGH THE STREETS OF PHILADELPHIA, FINALLY CROSSING OVER CITY LINE AVENUE AND ARRIVING AT ITS DESTINATION. IT WAS SATURDAY, DECEMBER 19, 1953. THE “HOSPITAL OF THE FUTURE” WAS OPEN FOR BUSINESS.

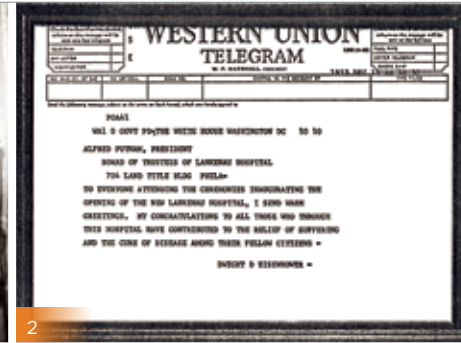
Just over 60 years ago, in a matter of only four hours, the entire Lankenau Hospital - including its patients, employees, deaconesses, student nurses, physicians and interns, volunteers and equipment - relocated from Girard and Corinthian Avenues to a new home. The rolling grass hills of the former Overbrook Golf Club and newly constructed, modern buildings welcomed the convoy.

The Lower Merion area was, at that time, the second fastest growing population center in the United States and in need of a hospital in the vicinity. Lankenau’s growing services required a larger site. Architect Vincent Kling was hired to design a facility to bring state-of-the-art medicine to the region.

Kling’s first-place, award-winning design for the new Lankenau was distinctive in its non-institutional look. The buildings showcased natural light, expansive views and



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“HOSPITALS REALIZE THAT IT IS NO LONGER ENOUGH TO TREAT THE SICK AND INJURED, THEY HAVE ASSUMED AN EVER-INCREASING RESPONSIBILITY IN MAINTAINING THE HEALTH OF THE COMMUNITY. THEY KNOW THAT AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE. THE FIRST HOSPITAL IN PHILADELPHIA WHICH HAS THE OPPORTUNITY TO DEVELOP A TOTALLY NEW AND UP-TO-DATE-PLANT TO FULFILL THIS MODERN CONCEPTION IS LANKENAU HOSPITAL” - PHILADELPHIA BULLETIN, MAY 21, 1950

functional arrangement. The physical plant offered abundant parking and most importantly, capabilities for future expansion. The “Hospital of the Future” was heralded by the *City Line News*. The *Philadelphia Inquirer* called it “the Nation’s most modern institution,” and the *Main Line Times* ran with the headline “Lankenau - The Hospital of Tomorrow.”

The \$10,300,000 project included the nation’s first hospital-based health museum containing \$30,000 worth of exhibits of human biology and specific diseases. Contemporary operating rooms were equipped with color televisions and cameras. A pneumatic tube system was installed for five-second delivery of drugs, messages and records. Oxygen was piped



to every patient room. For the first time, doctors' offices were housed on the hospital grounds so physicians could be closer to their patients. The nation's first cobalt unit for radiation delivery, the "Cobalt 60," offered Lankenau's patients a new option for cancer treatment. A novel concept called "rooming-in" allowed newborns to stay with mothers throughout the day and night. Inside and out, the Hospital was considered one of the most modern in America. The new facility discarded the old ward system, where as many as 20 beds would occupy a single room, replacing it with private and semi-private rooms. The "daily rate" for a hospital room ranged from \$9 to \$20. President of the Lankenau Hospital Board, Alfred Putnam, wrote to *Life* magazine "... if the (publishers of *Life*) could see the new Lankenau, they will never forget it. There is nothing like it in the world."
(continued on page 64)

1. The new Hospital included the nation's first hospital-based health museum.
2. A telegram from U.S. President Dwight D. Eisenhower at The White House to Alfred Putnam, the President of Lankenau's Board of Trustees, with his congratulations on the opening of the new Hospital
3. Surgeon Dr. Gilson Colby Engel kneels beside a patient alongside nurses, Lutheran deaconesses, physicians, residents and volunteers on moving day.
4. A caravan of ambulances leaves Girard Avenue in Philadelphia, headed for the new Overbrook site on December 19, 1953.
5. Ambulances transferred patients and equipment to the new Lankenau in under four hours.
6. Ed Bortz, MD, teaching interns at the bedside, 1953
7. The Overbrook site was favored for construction of the new Lankenau (over a location in the western suburbs) as it was the second fastest growing region in the country with 250,000 people living within a two mile area. It was also a shorter move from the Hospital's previous location at Girard and Corinthian Avenues in Philadelphia.



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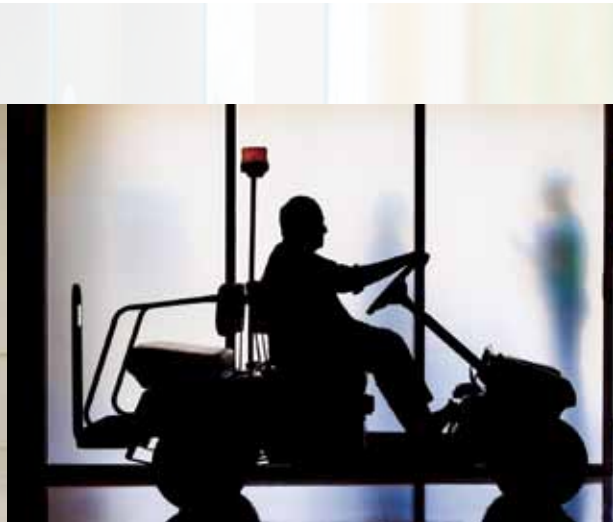
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LANKENAU HEART INSTITUTE



The Lankenau Heart Institute is a comprehensive cardiovascular program that unites a team of world-class consultative and interventional cardiologists, electrophysiologists, cardiovascular surgeons, and other specialists to deliver unparalleled care for individuals with heart disease.





The Lankenau Heart Institute offers patients access to cardiovascular experts across Main Line Health in the following disciplines:

Cardiac Rhythm Management:

disorders affecting electrical impulses that regulate the heart. This causes an irregular heartbeat – or cardiac arrhythmia – a condition where the heart beats significantly slower, faster or less efficiently than normal. *(For more, see page 30.)*

Cardio-Oncology:

an emerging multidisciplinary subspecialty addressing the impact cancer treatments can have on the cardiovascular system. *(For more, see page 34.)*

Cardiovascular Prevention & Wellness:

programs and services focused on the identification of risk factors for early detection in addition to lifestyle modification and patient education to enhance the ongoing management of known and/or worsening disease including:

- Women and Heart Disease *(For more, see page 40.)*
- Cardiac Rehab *(For more, see page 42.)*

Coronary Disease:

the narrowing or blockage of the arteries supplying oxygen to the heart, usually caused by atherosclerosis

(plaque build-up). These conditions can lead to heart attack, chest pain (angina), leg pain (claudication) or stroke. *(For more, see page 44.)*

Heart Failure/Pulmonary Hypertension:

diseases and disorders which cause weakening of the heart muscle and pumping function of the heart as well as increased pressures in pulmonary circulation. *(For more, see page 48.)*

Valvular Heart Disease:

disease and disorders impacting the heart's structure including mitral and aortic valve problems, septal defects, myxomas, left ventricular aneurysms, adult congenital defects and aortic disease (stenosis). *(For more, see page 50.)*

Vascular Disease:

any condition that affects your circulatory system, such as peripheral artery disease. This ranges from diseases of the arteries, veins and lymph vessels, to blood disorders that affect circulation. *(For more, see page 52.)*





Taking up residence on the first two floors of the new Heart Pavilion, the Lankenau Heart Institute site on the Lankenau Medical Center campus gives patients convenient access to both a sophisticated imaging center and the outpatient practice of more than 35 cardiovascular physicians.



New cameras allow for up to 50% lower radiation injection doses for patients undergoing nuclear stress testing.

(Heart Pavilion – Street Level)

The Cardiovascular Imaging Center

The Cardiovascular Imaging Center has been designed to operate in conjunction with the Lankenau Heart Group's outpatient services on the Mezzanine Level. The seamless coordination between outpatient testing and physician appointments gives patients convenient and comprehensive cardiovascular care.

The Imaging Center also serves our inpatient population. In order to promote patient privacy, the Imaging Center was designed so that inpatients enter the unit privately through the Hospital side with direct access to private holding areas out of sight of the public waiting areas.

The imaging suite has 12 procedure rooms equipped for the following screening and diagnostic tests: echocardiogram,

stress echo, nuclear stress, vascular ultrasound, and transesophageal echocardiogram (TEE). The suite also has multiple private prep and recovery bays and changing rooms.

A large, centrally-located reading room for physicians to review results is staffed 24 hours a day. It is four times larger than the previous facility, with twice the number of monitors. Non-emergent reports



are generated within three hours (vastly quicker than the required minimum of 48 hours for outpatients and 24 hours for inpatient studies). Urgent reports are read and reported in under 30 minutes.

In addition to increasing the number and size of procedure rooms, Lankenau has made a significant investment in new technology:

- A supine bicycle bed enables patients who are unable to walk on a treadmill to perform the necessary exercise to elevate the heart rate for a stress test. Without this equipment, these patients

would have potentially needed higher doses of a drug to artificially elevate their heart rate.

- New cameras allow for up to 50 percent lower radiation injection doses for patients undergoing nuclear stress testing and can accommodate larger patients.
- Live 3D TEE provides valuable information for surgeons and anesthesiologists. They can see heart valves from multiple perspectives while the heart beats, and have a comprehensive plan in place before surgery.



(Heart Pavilion – Mezzanine Level)

Cardiovascular Outpatient Care

All outpatient cardiology, vascular medicine, and cardiac surgery practices of the Lankenau Heart Group are now in one location on the mezzanine level of the Heart Pavilion, which allows for enhanced collaboration among caregivers to provide seamless, comprehensive heart care. The interior was designed to foster collaboration among these specialists so patients have coordinated access to the top doctors in their field. Studies have shown that better collaboration between caregivers leads to better outcomes, and the Heart Pavilion has been specifically designed to foster that environment.

The outpatient practice is comprised of 44 examination rooms within five sections, each with its own private waiting area and check-in/check-out desk. We have revamped many administrative functions to enable quicker registration and access to physicians. The process of scheduling as well as screening and triaging phone calls has become a centralized function so that front desk staff can be fully focused on the patient's check-in/check-out and scheduling needs without distraction.

Patients' needing diagnostic testing in conjunction with their physician

appointment benefit from a state-of-the-art Cardiovascular Imaging Center conveniently located in the Heart Pavilion one floor below, on the Street Level. But, for those patients who may be in need of immediate imaging services during their doctor's appointment, a satellite echocardiogram and stress echo testing room is located on this floor. In addition, patients who need blood work following their appointment can have their blood drawn right there in the suite without having to schedule a separate appointment at Lankenau's primary Outpatient Lab.



The interior was designed to foster collaboration among specialists so patients have coordinated access to the top doctors in their field.



Meet The Lankenau Heart Group

THE DEPTH AND BREADTH OF EXPERIENCE

found within the Lankenau Heart Group distinguishes it from other cardiovascular practices in the region. The advanced capabilities of the physicians span the full spectrum of cardiovascular care—from routine cardiac assessments and heart disease management to state-of-the-art diagnostic technologies, customized prevention, and tertiary care for patients with complex cardiac disease. By pairing the latest preventive, diagnostic, therapeutic and surgical interventions with their passion for innovation, the Lankenau Heart Group team is delivering exceptional results and a superior patient experience.



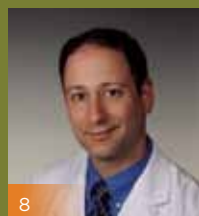
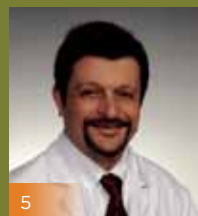
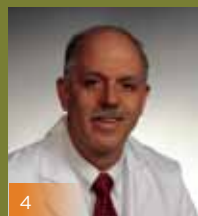
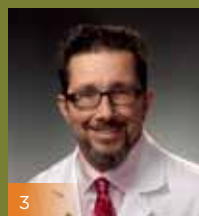
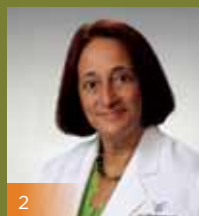
FOR MORE THAN 50 YEARS, LANKENAU MEDICAL CENTER

has garnered a reputation for clinical excellence, innovation and research in cardiovascular care. At the core of Lankenau's cardiovascular clinical program is a team of experienced consultative and interventional cardiologists, electrophysiologists, cardiac surgeons, and specially trained nurses and technologists who work collaboratively to ensure that

patients receive timely, appropriate cardiac care and interventions.

It is their commitment to meet the region's diverse cardiovascular needs and deliver to patients a level of quality, service, and experience that is unprecedented in the region. The *Lankenau Heart Group* physicians have patient offices on the Mezzanine level of the Heart Pavilion and throughout the region, including sites in Aston, Conshohocken, Lafayette Hill, Exton, Glen Mills, Media, Philadelphia, Roxborough and Springfield. For more information about our heart specialists and their locations visit mainlinehealth.org/heart. To schedule an appointment, please call 484.476.1000.

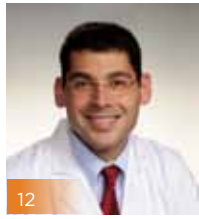
CARDIOLOGISTS



CARDIOLOGISTS



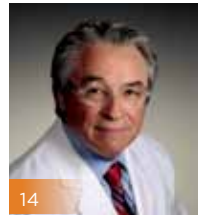
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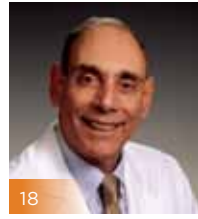
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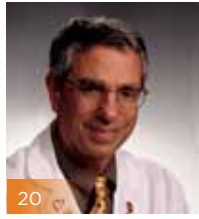
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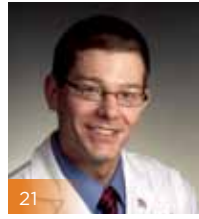
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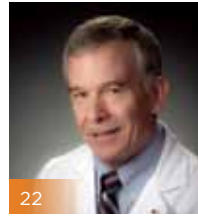
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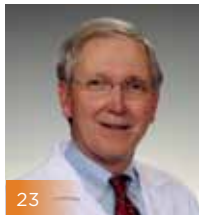
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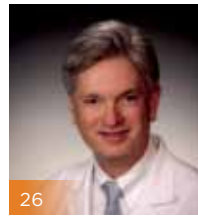
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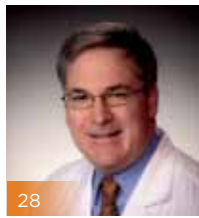
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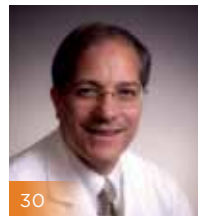
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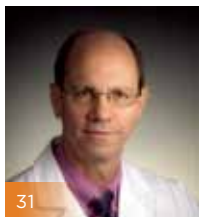
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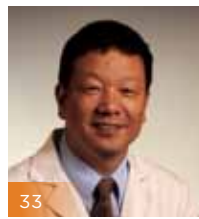
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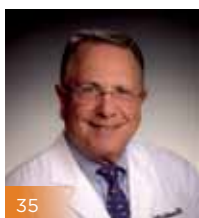
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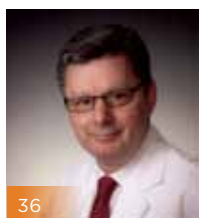
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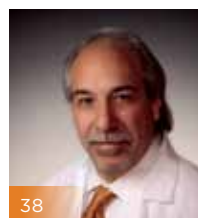
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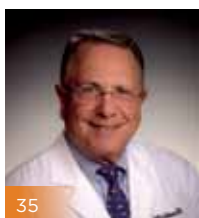


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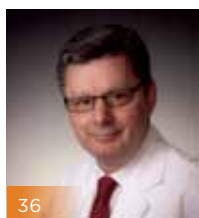


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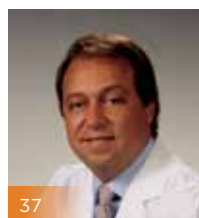
1. Sandra V. Abramson, MD
2. Andrea J. Becker, MD
3. Robert J. Bulgarelli, DO
4. James F. Burke, MD
5. George N. Chamoun, MD
6. Paul M. Coady, MD
7. Michael A. DeAngelis, MD
8. Steven M. Domsky, MD
9. Christopher J. Droogan, DO
10. Douglas B. Esberg, MD
11. Donald V. Ferrari, DO
12. Eric M. Gnall, DO
13. Katie M. Hawthorne, MD
14. Irving M. Herling, MD
15. Maribel Hernandez, MD
16. Amid A. Khan, MD
17. Dusan Z. Kocovic, MD
18. Bruce Kornberg, DO
19. William N. Kornberg, DO
20. Peter R. Kowey, MD
21. Richard R. McCurdy, Jr. MD
22. Richard R. McCurdy, Sr. MD
23. Frank C. McGeehin, III, MD
24. Erin A. O'Malley Tysko, MD
25. Riti Patel, MD
26. Thomas P. Phiambolis, MD
27. Jeanine E. Romanelli, MD
28. Steven A. Rothman, MD
29. Henry S. Sawin, MD
30. Timothy A. Shapiro, MD
31. Geoffrey P. Tremblay, MD
32. Kar-Lai Wong, MD
33. Gan-Xin Yan, MD
34. Donald F. Yih, MD
35. Scott M. Goldman, MD
36. Konstadinos A. Plestis, MD
37. Roberto Rodriguez, MD
38. Louis E. Samuels, MD
39. Francis P. Sutter, DO



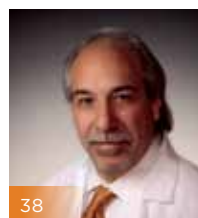
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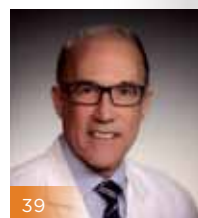
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CARDIAC SURGEONS



A Rich Legacy of Research

For nearly a century, Lankenau Medical Center has been a uniquely prolific and innovative center for research. From its inception, the research program at Lankenau has been driven by its physicians who seek greater understanding and advancement of their field of medicine. Over the years, physicians across a variety of disciplines have worked closely with colleagues in our research laboratories and clinical trial centers on the continued development of robust basic (laboratory-based) and clinical (trial-based) research programs.

When Lankenau's first research institute was founded in 1925 by a Lankenau physician, scientific investigation became firmly entrenched in the mission of the organization. Landmark explorations of the cell division of cancer were underway in the late 1920s. By 1931, Lankenau's groundbreaking studies placed the organization firmly on

the map with the research institute gaining national recognition.

In the 1930s and 40s, Lankenau's research institute became a center of excellence in nutrition and biochemistry. Key studies at that time were fundamental in the discovery of how cholesterol is synthesized in the body, and contributed to the discovery of



What continues to set Lankenau's research endeavors apart from other

Vitamin B12. Later studies on muscle deterioration and bone demineralization laid the groundwork for the investigation on the effects of weightlessness on astronauts' bodies.

In the 1950s, Lankenau scientists achieved the first successful transplantation of a cell nucleus, an achievement which became known as the first "cloning" of an organism and enabled the creation of Dolly the sheep, the first cloned animal, and later work from the winner of the 2012 Nobel Prize in Physiology or Medicine. In the 1960s, Lankenau was involved in studies leading to development of the first Hepatitis vaccine.

In the 1970s, Lankenau was a principal in groundbreaking research on heart rhythm disorders, beta blockers and effects of exercise on the heart. Researchers participated in a large-scale national study that led to the crucial discovery of the impact of aspirin on heart disease. Advances in cardiovascular research continued into the 1980s when Lankenau was one of four hospitals taking part in a study proving that lower cholesterol reduces the risk of heart attack.

For more than 25 years, Lankenau cardiologists have conducted clinical trials and drug development efforts related to patients with atrial fibrillation and other heart rhythm disorders. One recent initiative, the dabigatran study, led to the biggest therapeutic breakthrough in more than half a century for helping to prevent stroke in these patients. Today, research coordinated through the Lankenau Heart Institute and Lankenau Institute for Medical Research continues to seek a deeper understanding of the heart's electrical system and its therapeutic control.

What continues to set Lankenau's research endeavors apart from other institutes is that the entire research enterprise is focused on practical application. Its mission is translational in nature, seeking to participate in initiatives that bring therapies and cures from the bench (laboratory) to the bedside (clinical application) as quickly as possible. Lankenau's team is interested in trials with high scientific value and selects trials that have potential to deliver an immediate benefit for our patients with the end goal to improve a patient's quality of life.



institutes is that the entire research enterprise is focused on practical application.



Heart Rhythm Research at Lankenau Heart Institute

Clinical trials
make up
the engine
that drives
advances in
medicine.

Lankenau Heart Institute's electrophysiology program is widely respected for its clinical expertise and technological and research contributions which have advanced the field of cardiac rhythm management and enhanced patient outcomes.

The team has extensive experience in ablation therapy for the treatment of irregular heart rhythms (arrhythmias) including supraventricular tachycardia, ventricular tachycardia and atrial fibrillation. In partnership with industry leaders, our team has pioneered the development of many antiarrhythmic drugs and antitachycardia devices that

has spearheaded our efforts in clinical trial research.

Building on the rich history of innovation on the Lankenau campus, research and clinical trials continue today to play a vital role in the Lankenau Heart Institute's efforts to prevent, diagnose and treat the full range of heart conditions. These trials often lead the

way for new and promising treatments for patients with heart disease.

Directed by internationally renowned physician and researcher Peter Kowey, MD, System Chief, Division of Cardiovascular Diseases, the Lankenau Institute for Medical Research's (LIMR) Center for Clinical Cardiology is a recognized leader in innovative clinical cardiology and cardiac surgery research. Its focus includes arrhythmias, atherosclerosis, heart failure, peripheral vascular disease, preventive medicine and cardiac surgery with an emphasis on valve and complex aortic disease.

The Center also provides support for LIMR's program in cardiovascular research in the laboratory. This program, led by Robert Cox, PhD, focuses on the development of novel drugs and devices in the areas of arrhythmia disorders, heart attacks and strokes, and heart failure. Patient outcomes, the causes of high blood pressure and the use of stem cells in cardiac regeneration are also emphasized. The basic cardiovascular electrophysiological laboratory, led by Gan-Xin Yan, MD, PhD – an internationally renowned pioneer in J wave syndromes and Brugada syndrome – focuses on all types of arrhythmias leading to sudden cardiac death, and provides the pharmaceutical industry over the world with service in research and development. Dr. Li Zhang, Associate Professor, Jefferson Medical College/LIMR, and Director of Cardiovascular Outcomes Research for the Center for Clinical Cardiology, specializes in investigating inherited arrhythmias associated with increased risks of sudden death in young, otherwise healthy individuals. Her work seeks to improve the early diagnosis of lethal heart rhythm disorders for prompt medical intervention and sudden death prevention.

Today, we go even further, as we seek to better understand atrial fibrillation (AF), the most common arrhythmia. It is estimated that almost three million Americans suffer from AF and that number is expected to dramatically increase over the next 30 years. At the Lankenau Heart Institute, our researchers and physicians are exploring the root cause of AF, examining the different ways it manifests in different patients and investigating ways to create more targeted therapeutics that address these questions.

Clinical trials make up the engine that drives advances in medicine. Whether it is a single- or multicenter trial, we firmly believe



ENDOWED CHAIR FORTIFIES CARDIOVASCULAR RESEARCH

In 2006 The W.W. Smith Charitable Trust made a \$1.5 million commitment to Lankenau Medical Center to establish the William Wikoff Smith Chair in Cardiovascular Research, currently held by Dr. Peter R. Kowey. This significant gift will provide

fundings support in perpetuity to fortify Lankenau Heart Institute's cutting-edge basic research, sustain its expansive clinical research programs and attract physician leaders to our campus. The W.W. Smith Charitable Trust has a tremendous history of supporting research initiatives at Lankenau, spanning several decades with funding of nearly \$4.3 million. Most recently, the Trust made a five-year grant of \$625,000 specifically to support pioneering research studies that have been slowed or stalled due to increased funding pressures.

that translational research provides more creative solutions. The CABANA trial is an investigation in which Lankenau is currently participating. It has the potential to impact the standard guidelines for treating AF. Sponsored by the National Institutes of Health, CABANA (Catheter Ablation versus Antiarrhythmic Drug Therapy for Atrial Fibrillation) is *(continued on page 64)*





Building a Cardio-Oncology Program

CANCER TREATMENT IS IMPROVING.

THERE'S NO DOUBT ABOUT IT. BUT AT WHAT COST?

The advances in the past few decades in treatment of cancer have changed the diagnosis of many cancers from a terminal condition to a chronic disease. But this very treatment can have unintended consequences and devastating effects for the most crucial organ: the heart.

Irving M. Herling, MD, Director of Clinical Cardiology for Lankenau Medical Center and Main Line HealthCare, and Paul B. Gilman, MD, Chief, Division of Hematology/Oncology for Lankenau Medical Center and Section Chief of Medical Oncology for Main Line HealthCare, spoke with Lankenau Leaders magazine about why collaboration between these two disciplines is so crucial, and the steps the Lankenau Heart Institute is taking to coordinate this effort.



LL **Let's start with the basics. How can cancer treatment affect the heart?**

IH Unfortunately, at times, the very treatments effective in destroying or damaging cancer cells may have unintended adverse impact on the heart. We call this cardio-toxicity. It can affect the heart muscle, valves, blood supply and lining, and electrical activity, as well as damaging other vascular structures, promoting potentially dangerous blood clotting, and worsening or producing high blood pressure. In fact, the leading cause of death in cancer survivors is cardiovascular disease. Since all of us started from one cell, it is not surprising that treatments directed at killing cancer cells may inadvertently damage or compromise non-cancerous cells and tissues. For example, radiation treatment to the chest for Hodgkin's lymphoma is well known to frequently inflict damage on the structures of the heart. This damage may take decades to become clinically apparent. Another example is that radiation treatment of left breast cancer may produce or accelerate coronary atherosclerosis - a disease in which harmful plaque builds up inside the arteries which supply oxygen to the heart, effectively reducing the amount of blood, and oxygen, that can flow through these vessels.

PG Likewise, certain chemotherapy drugs may damage cardiac muscle. Sometimes these

“What’s important to know is that many of the adverse effects of cancer treatment on the heart, although unintended, can be anticipated and therefore monitored, managed or avoided altogether.”

effects are permanent, sometimes only temporary, but either way they can result in clinical heart failure. Other newly developed cancer drugs initially anticipated as being cancer-specific may produce new hypertension (high blood pressure) or worsen pre-existing hypertension which can result in heart failure, stroke or kidney damage.

IH Basically, this means that life-saving cancer treatment can actually come hand-in-hand with a significant cost in quality of life, or even life itself, because of a heart complication.

LL **Is this something that applies to ALL patients with cancer?**

PG There are several specific therapies which have an anticipated potential impact on the cardiovascular system, that is, known cardio-toxic effects. A patient receiving those therapies may therefore potentially be at risk for cardiovascular complications. Ongoing research in this field will help us expand our knowledge about cardiotoxicity.

IH Cardiovascular complications can present in patients with pre-existing cardiovascular issues going into their cancer therapy; patients with certain risk factors going into cancer therapy; patients who have recently received cancer treatment; as well as long-term cancer survivors.



Lankenau Medical Center (LMC) Cardio-Oncology Program Leads L to R: Alex Garton, MD, Eileen and Ira Ingerman Chief Fellow in Cardiovascular Diseases; Irving M. Herling, Director of Clinical Cardiology; Aarti L. Shevade, MD, Hematology/Medical Oncology Fellow; and, Paul B. Gilman, MD, Chief of Hematology- Oncology

“When appropriate, patients with a diagnosis of cancer who are weighing their treatment options will undergo a detailed cardiovascular assessment prior to the initiation of a treatment plan.”

LL What are some of the “risk factors” you speak of?

PG Patients with pre-existing conditions such as high blood pressure, significant disease of heart valves, coronary artery disease, and heart failure are at increased risk. Other patients at increased risk include the very young and the elderly, or those with heart disease-related risk factors such as diabetes, hyperlipidemia, high cholesterol, smoking habits, and obesity.

IH Often, those exposed to certain cancer therapies may remain at increased risk of a heart complication for the remainder of their lives, regardless of the outcome of their cancer

treatment. Therefore treatment options and decisions for these patients require thoughtful and ongoing teamwork and discussions between their cardiologist and oncologist and often a detailed cardiovascular assessment prior to the initiation of their treatment plan.

LL Why is the link between cancer treatment and heart complications receiving attention now?

PG As cancer treatments have improved, survivorship rates have increased. More people are living beyond a cancer diagnosis – which is great! At the same time, we have seen a trend of increasing cardiovascular complications in those individuals. The leading cause of death in cancer survivors, other than a recurrence of their cancer, is cardiovascular disease. Developing what we call “survivorship services” is an important focus within oncology across the country. How we mitigate potential cardiovascular complications should be a core component of a robust, comprehensive survivorship program.

IH What’s important to know is that many of the adverse effects of cancer treatment on the heart, although unintended, can be anticipated and therefore monitored, managed or avoided altogether. The American College of Cardiology released its predictions for biggest cardiology news for 2014. Cardio-oncology made the list. Cardiologists and oncologists across the country are starting to realize just how crucial it is to address the link between these two disciplines.

LL Why do cardiovascular complications sometimes get missed?

IH The difficulty dealing with the cardio-toxic side effects of cancer therapy is that they can often mask themselves as normal effects from the cancer treatment itself such as fatigue or shortness of breath. Medicine has become highly specialized and even in cardiology, for example, there are sub-specialties such as electrophysiology, heart failure, and interventional cardiology. Specialized education and training in the discipline of Cardio-Oncology is required in order to best understand, identify and manage these complex patients.

LL So what is the Lankenau Heart Institute doing to address the problem?

IH As a consequence of this knowledge, it has become imperative for cardiologists to become skilled in this discipline, and knowledgeable about cancer treatments being offered to patients. Additionally, it is crucial for oncologists to understand the potential adverse implications of cancer therapies on the cardiovascular system and to work hand-in-hand with cardiologists to maximize the care of these patients. Lankenau Heart Institute is creating a formal Cardio-Oncology program, in conjunction with cardiology and oncology colleagues throughout the Main Line Health system, to address this gap in knowledge and collaboration between disciplines. New guidelines and strategies put in place will help to manage cardiovascular risk and prevent heart complications in patients with a new cancer diagnosis and cancer survivors post treatment. This will involve a team approach highly focused on each patient's specific case. New screening protocols will help identify at-risk patients prior to treatment, and monitor those who have already undergone treatment. Patients will be able to enter into cancer treatment with full knowledge of their risk, potential for adverse effects on the heart and a system in place to minimize that risk or eliminate it altogether. The program will also facilitate more research in this field, so that in the future we can better predict each patient's predisposition to develop heart complications. We can further study the mechanisms by which cancer drugs affect the heart; establish strategies to combat these complications; and design less cardio-toxic cancer treatments.

LL What are some examples of screening tests?

IH When appropriate, patients with a diagnosis of cancer who are weighing their treatment options will undergo a detailed cardiovascular assessment prior to the initiation of a treatment plan. This may mean a consultation with a cardiologist so that we can get a better picture of their heart system and any existing cardiovascular risk factors prior to the effects of any cancer therapy. That helps us understand any changes



The Cardio-Oncology Program is a Main Line Health initiative led by Lankenau Heart Institute physicians and oncologists across the System including:

Lankenau Medical Center

- Alex Garton, MD, Cardiovascular Medicine
- Paul B. Gilman, MD, Hematology/Medical Oncology
- Katie Hawthorne, MD, Cardiovascular Medicine
- Irving Herling, MD, Cardiovascular Medicine
- Aarti L. Shevade, MD, Hematology/Medical Oncology

Bryn Mawr Hospital

- Erik D. Assarsson, MD, Radiation Oncology
- Amy Curran, MD, Hematology/Medical Oncology
- John G. Devlin, MD, Hematology/Medical Oncology
- Sameer Gupta, MD, Hematology/Medical Oncology
- Linna Li, MD, Radiation Oncology
- Mark D. Lisberger, MD, Cardiovascular Medicine
- Tarun Mathur, MD, Cardiovascular Medicine
- Lawrence S. Mendelson, MD, Cardiovascular Medicine

Paoli Hospital

- Won S. Chang, MD, Radiation Oncology
- Michael B. Dabrow, DO, Hematology/Medical Oncology
- Donald V. Ferrari, DO, Cardiovascular Medicine
- Brian F. Wilner, MD, Cardiovascular Medicine

Riddle Hospital

- William N. Kornberg, DO, Cardiovascular Medicine
- Andrew J. Solan, MD, Hematology/Medical Oncology
- Brian S. Wojciechowski, MD, Hematology/Medical Oncology



“A patient's genes may be able to tell us whether they are more susceptible to cardio-toxicity.”

which may occur after treatment. Some patients may be referred to have some simple screenings such as an echocardiogram (an ultrasound of the heart), a cardiac stress test (which tells us how a heart performs under stress), or a cardiac MRI to get a better picture of the blood flow to and through the heart.

LL **How common is it to find an institution with a Cardio-Oncology program?**

IH There are a select few Cardio-Oncology programs in the U.S. Those currently in existence are associated with large academic medical centers with large oncology programs such as the Cleveland Clinic, Mayo Clinic and Mount Sinai. We are proud that Lankenau Medical Center, together with Bryn Mawr, Paoli, and Riddle hospitals, is taking steps to create this very specific program and be among such an elite group of health care organizations.

LL **What would a formal Cardio-Oncology program mean for Lankenau Heart Institute patients?**

PG This initiative will provide a great benefit to our patients who will be able to maximize their ability to have their cancer cured, while preventing or minimizing incidental cardiovascular complications. Our goal is to restore that quality of life for our patients, so they can live their lives to their fullest with-

out cancer and without the potential cardiac implications of their cancer treatment.

IH The formalized education of and collaboration between all of the physicians and caregivers within our two disciplines – cardiology and oncology – mean that our patients will not have to choose superior cancer care or superior heart care. They can have both. Most importantly, their care will be managed by a coordinated team with everyone focused on the same goal – patient-centered care.

PG It's also incredibly important for the future of this specialized field to collect data for research analysis so we can continue to be at the forefront of the field of Cardio-Oncology. Personalized therapy – specific to an individual's genetic makeup – is becoming a rapidly evolving field. A patient's genes may be able to tell us whether they are more susceptible to cardio-toxicity. The data acquired in the care of our patients, including genetic analyses, will contribute to medical advances, ultimately helping us identify who specifically is at risk of these complications and how to better avoid or treat them. Through collaboration with the Lankenau Institute for Medical Research, our oncology and cardiology fellowship programs, and oncology and cardiology clinical trial teams, the possibilities for research in Cardio-Oncology are endless.



Judith Taylor, along with family members Howard Taylor and Susan and Gregg Schneider, recently made an \$80,000 pledge to Lankenau Medical

Center to help establish and grow the formal Cardio-Oncology Program. This support of Cardio-Oncology is part of the family's larger \$100,000 pledge made in memory of Jerome Taylor, Mrs. Taylor's late husband and father to Howard Taylor and Susan Schneider.

"Through this gift, we hope Jerry's legacy at Lankenau Medical Center will be to help Dr. Herling

and his colleagues develop protocols and therapies for those who are at risk for or develop cardiac problems as a consequence of cancer treatment," says Mrs. Taylor. "Our family is gratified to establish The Judith and Jerome Taylor Fund for Cardio-Oncology to help improve outcomes and provide a better quality of life for those patients facing these challenging diseases."

To learn more about how you can support this emerging program, please contact Carolyn Goldman in Lankenau's Development Office at 484.476.8068.

Above left: The late Jerome Taylor and Judith Taylor

The Lankenau Heart Institute and Hosts

Peter and Louise Havens & Lankenau Medical Center President Phillip D. Robinson
Wish to express our thanks to the physician experts and community members who participated in our educational event

A Conversation about Cardiac Care: Emerging Science, Treatments and Technologies at Lankenau Medical Center

Please plan to join us for future conversations with our expert physicians to learn more about developments in health care.

Special appreciation to Panelists:

Peter R. Kowey, MD, Chief of Cardiovascular Diseases, Main Line Health

Steven M. LaPorte, MD, Chief of Cardiology, Paoli Hospital

Konstadinos A. Plestis, MD, System Chief of Cardiothoracic and Vascular Surgery for the Lankenau Heart Institute, Main Line Health

Leslie H. Poor, MD, Attending Physician, Bryn Mawr Hospital and Co-Director of Women's Heart Initiative, Main Line Health

Timothy A. Shapiro, MD, Director of the Cardiac Catheterization Laboratory and Director of the Interventional Cardiology Fellowship, Lankenau Medical Center



The Women's Heart Initiative

Learn. Act. *Live.*

LEARN: Learn more about heart health, the risks of heart disease and how to live a healthier lifestyle. Share this knowledge with other women in your life – sisters, mothers, daughters and friends – so that they too are empowered.

ACT: Make choices that reflect a commitment to heart health – go to a health screening, attend educational programs, learn to cook heart-healthy recipes, make your first priority you.

LIVE: Live your life to the fullest, knowing that if you ever need medical help, the Women's Heart Initiative is right around the corner – providing the region's best doctors, surgeons and cardiovascular health programs tailored exclusively for women.

Heart disease takes the life of a mother, daughter, sister, or friend every sixty seconds. Yet many women aren't even aware that it is their biggest health risk and the leading cause of death in women in this country. This widespread lack of awareness is a huge issue – one which the Lankenau Heart Institute is determined to tackle head on.



Launched in 2008, the Women's Heart Initiative was created to empower and educate our community by raising awareness about women's heart care with a simple, three-word mission: Learn. Act. Live. "Our efforts to educate women in our community go beyond our outreach events," says Maribel Hernández, MD, Co-Director of the Women's Heart Initiative. "We specifically designed the program to also include focused and structured medical training for both physicians and nurses which will help them recognize and assess overlooked disease and atypical symptoms."

The mission of the Women's Heart Institute hits close to home for Lankenau Medical Center Trustee and Women's Heart Initiative Committee member, Carol Cutler. "Imagine hearing the words 'You are having a heart attack right

now,'" says Carol, who underwent emergency quadruple bypass surgery at Lankenau in 2006. "Even though I had experienced several typical symptoms over the prior few days, I still couldn't fathom the possibility of it happening to me," she remembers. "I can safely say that many women are not aware of their risk of heart disease, but even fewer understand that they could be having a life-threatening heart attack and not even know it!"

Carol was an active, gym-going, fit, 46-year-old mother of three when she had her heart attack. To this day, she maintains that being her own advocate and finally paying attention to her body made a difference between life and death. "Women experience warning signs of heart disease differently than men, and, as a result, are often only diagnosed when the disease is already at an advanced stage," says Dr. Hernández. "Additionally, women don't necessarily experience the classic symptoms (chest pain, shooting pain down the left arm) during a heart attack." In fact, they could even experience no symptoms at all. "This makes knowing your risk factors and being aware of your heart's health that much more important for a woman, even those who seem unlikely candidates for heart disease."

But why are so many women leaving their heart's health up to chance? "Most women put their own needs behind the needs of their families, rarely considering the risks and dangers of this devastating disease which almost took my life," says Carol. "We also tend to delay seeking care when symptoms present themselves." Carol first felt a twinge of pain during a workout at the gym. Over the next few days, she experienced some breathlessness. Later that week, she felt heavy pressure in her chest at home and recalled that it was a common symptom of heart problems. She decided to seek help. But when paramedics said her vitals looked normal, Carol had to stand up for herself. "I made them take me to the emergency department anyway, and then, after I underwent tests at the hospital, they discovered that I had a severe heart condition - one that could have taken my life at any time." Grateful that the cardiovascular team at Lankenau Medical Center saved her life, Carol has made it her mission to bring awareness to women in the community.

"Breast cancer is such a well-known cause, and they've done a wonderful job with those campaigns - but more women are going to die of heart disease and we don't have that same kind of support or awareness for that cause out there yet," says Carol. "I want every woman to know how to start an open discussion with her physician about her heart. I want every woman to recognize the less-known symptoms of heart

Only 1 in 5 American women believe that heart disease is her greatest health risk. 90% of women have one or more risk factors for developing heart disease.

disease and heart attack like unexplained fatigue, nausea and anxiety. Every woman needs to be knowledgeable enough to be able to count on herself and take her body seriously. One woman losing her life every 60 seconds is scary."

Offering health screenings, workshops and other heart-healthy events, the Women's Heart Initiative includes a team of Lankenau Heart Institute cardiologists, heart surgeons, nurses and other highly-trained health care professionals who understand the distinct needs of women and seek to educate community members and clinicians alike. "Our aim is to be a leading resource not only for women and their families, but also for clinicians who seek to further their understanding of cardiovascular disease and how it affects women in particular," says Dr. Hernández.

SAVE THE DATE

6:30 PM SATURDAY, MARCH 7, 2015

The John B. Deaver Auxiliary of the Women's Board of Lankenau Medical Center

PRESENTS

A STARR-Y NIGHT

AT THE FRETZ SHOWROOM, PHILADELPHIA NAVY YARD
FEATURING FABULOUS FOOD BY STEPHEN STARR

Proceeds to benefit the Women's Heart Initiative at Lankenau Medical Center

Space is limited. Call to reserve your ticket today. Sponsorship opportunities available. 484.476.2139



A Lifestyle Intervention

When Frank O'Neil's heart was failing, a heart transplant saved his life. But what improved his quality of life, and gave him the strength to support his new heart after a transplant, was an individually tailored cardiac rehabilitation program.

About 6.5 million Americans live with heart failure, a condition in which the heart cannot pump enough blood to meet the body's need for oxygen, and 650,000 new cases are diagnosed each year, according to the American Heart Association. The Lankenau Heart Institute offers cardiac rehabilitation services to equip heart failure patients with tools to improve their quality of life and manage their heart disease.

However, the benefits of cardiac rehab are not limited to those with a diagnosis of heart failure. People who have had a recent heart attack, angina attacks or open-heart surgery, angioplasty and stents, also stand to benefit from the broad approach of a comprehensive cardiac rehab program.

For the eight weeks after heart transplant surgery, Frank met with the cardiac rehab nurse specialists at Lankenau Medical Center, two to three times a week, for hourly exercise and lifestyle education sessions. "Attending our cardiac rehab program is different from a patient trying to exercise on their own after a cardiac event," says Dianne Baker, MSN, RN-BC, CDE, Manager of Outpatient Cardiac Rehab at Lankenau. "Our nurses are there to supervise, provide physical assessments and emotional support for each patient, at every session. We can also have direct and immediate contact with the patient's physician if there are any concerns."

Under the careful watch of specially trained nurses, Frank started working out slowly for a



few minutes, using various pieces of equipment within the rehab suite. Based on his heart's response to the exercise, the duration and intensity of his sessions gradually increased. Although his participation in the program was temporary, Frank soon realized that the lessons he was learning were for life. "Cardiac rehab is not just about getting someone past a recent cardiac event," Dianne states. "It's a lifestyle intervention to help them redesign the way they live and to equip them with healthy habits that they can incorporate into their daily routine for the rest of their lives." Dr. Jay Siegfried, President of Lankenau's Medical Staff and Chief of the Division of Physical Medicine and Rehabilitation, agrees. "When you go to cardiac rehab, the point is not to graduate. The goal is for patients to take in information on how to exercise, develop healthy habits and apply those to their lives every day."

Frank has taken these lessons learned to heart. Having completed Lankenau's cardiac rehab program, he now regularly goes to the Planet Fitness gym in Manayunk for an hour a day, lifting weights and performing aerobic exercise. Benefits have included more energy and stronger muscles. But the benefits are not just physical. By participating in cardiac rehab Frank reports improved self-confidence and an enhanced sense of well-being. Once in a while Frank catches a glimpse of himself in a gym mirror and thinks, "Wow, how can I be doing this?"

The cardiac rehab program at *(continued on page 65)*

COMMON MISPERCEPTIONS ABOUT CARDIAC REHAB:

"Cardiac rehab is just for men. After all, heart disease is a man's disease, or affects only the elderly or out of shape."

FALSE! Heart disease does not just affect men, the elderly and those who are unfit. In fact, heart disease is the leading cause of death in women. Lankenau's cardiac rehab program serves both men and women, an age group spanning early 20s to late 90s, and physically fit individuals (including marathon runners)!

"Cardiac rehab is a short-term program and no longer applicable after completing the course."

FALSE! Cardiac rehab is just the beginning of a lifelong approach to heart health. It seeks to equip our patients so that they can continue everything they've learned during their participation in the program for the rest of their lives.

"Cardiac rehab is just an exercise program."

FALSE! Our patients have the best chance of improving their quality of life and reducing the likelihood of future cardiovascular disease by benefiting from a combination of the "three Es": Exercise, Education and Emotional Support. Yes, exercise is an important component, but the full benefit of rehab is only experienced through a comprehensive program offering education and support services.

"The exercise in Cardiac Rehab only re-builds your heart muscle."

FALSE! The exercise part of cardiac rehab is not only about the mechanism of the heart but also about the mechanisms of other muscles of the body. Cardiac rehab helps to train peripheral muscles to work much more efficiently, so that with the same amount of heart pumping, those muscles are more efficient.



Beyond the Blue Drapes:

A behind-the-scenes look at robotic surgery

By Brittany Thompson

WHEN I WAS GIVEN THE OPPORTUNITY TO TAKE *LANKENAU LEADERS* photographer Jeff Fusco into an operating room during cardiac surgery, I jumped at the chance. As a former biology major with a fascination for all things medical, I couldn't resist. A patient of Dr. Francis Sutter, Lankenau Medical Center's Chief of Cardiac Surgery, graciously granted our access behind-the-scenes during his robot-assisted coronary bypass surgery.

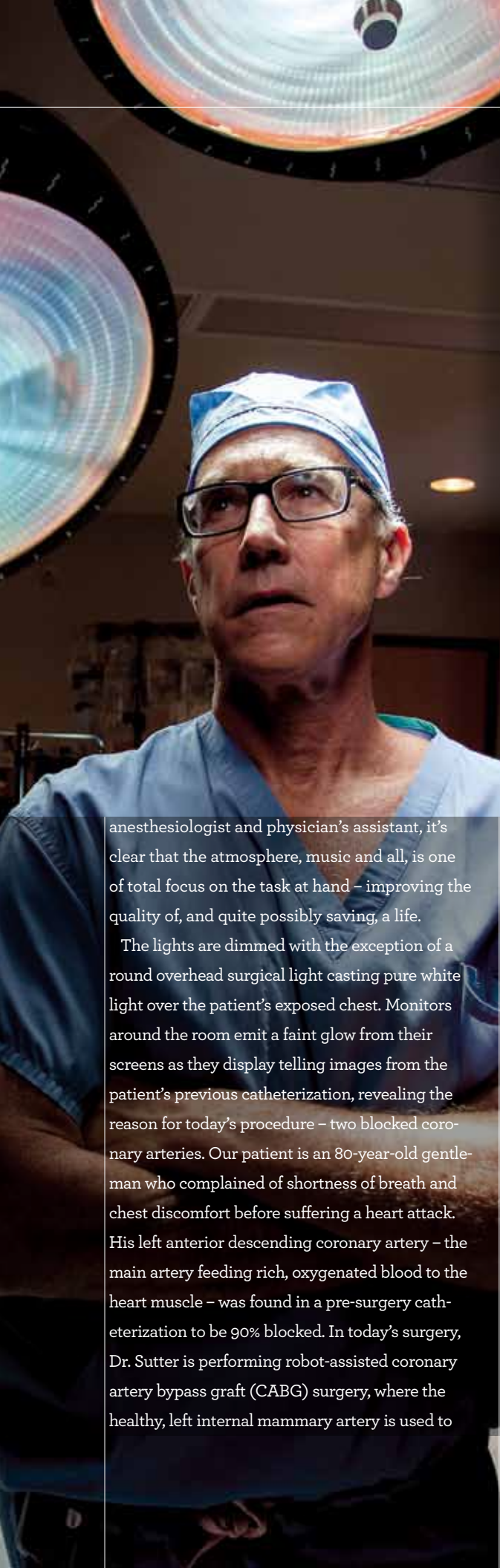
8:30 am rolls around and it's time to get ready. Jeff and I don our bright orange scrubs which scream "visitor," surgical hats, shoe covers and masks, and meet our guide at the entrance to the Operating Room Suites. As Mary Ann Wertan, Lankenau Medical Center's Division Coordinator for Cardiothoracic Surgery, leads us to OR number three, we gather ourselves – excited, nervous, and determined not to get in the way. Surgery is serious stuff. I'm already hugging my arms close to my body, careful to avoid touching anything sterile, and I haven't reached the door yet. We arrive mid-procedure. A small window offers us our first peek at the surgical arena – a vast sea of blue drapes and blue scrubs worn by people who've made life-changing surgery their profession. At last, we enter.

Inside, the patient is already on the table. An hour earlier, after general anesthesia had been administered, Dr. Francis Sutter made a 1½-inch incision precisely between the ribs on the left

side of the patient's chest. A da Vinci® Robotic Surgical System miniature video camera, mounted on a precision-guided robotic arm covered in sterilized plastic, was carefully guided through the opening into the chest. This elaborate technology is capable of sending a live feed of the procedure to the surgeon's console and other monitors in the suite. Two more slender robotic arms were then inserted into the chest acting as ports for the surgical instruments. Unlike traditional surgery, robot-assisted coronary bypass surgery does not require breaking the breast bone to reach the heart so the ribs are left in place and blood loss, pain and scarring are minimized.

There is an assuring sense of calm in the operating room. A radio plays a country music playlist and machines hum rhythmically in the background. I had almost expected total silence would be mandated by the surgeon, but as I look around at Dr. Sutter, the OR nurses,





anesthesiologist and physician's assistant, it's clear that the atmosphere, music and all, is one of total focus on the task at hand – improving the quality of, and quite possibly saving, a life.

The lights are dimmed with the exception of a round overhead surgical light casting pure white light over the patient's exposed chest. Monitors around the room emit a faint glow from their screens as they display telling images from the patient's previous catheterization, revealing the reason for today's procedure – two blocked coronary arteries. Our patient is an 80-year-old gentleman who complained of shortness of breath and chest discomfort before suffering a heart attack. His left anterior descending coronary artery – the main artery feeding rich, oxygenated blood to the heart muscle – was found in a pre-surgery catheterization to be 90% blocked. In today's surgery, Dr. Sutter is performing robot-assisted coronary artery bypass graft (CABG) surgery, where the healthy, left internal mammary artery is used to

bypass (go around) the blockage, restoring the flow of oxygenated blood to the heart muscle.

Dr. Sutter is seated a few feet away from the patient bedside at the surgeon's console. His face is pressed forward into the viewer. A built-in microphone enables him to communicate with his team who are positioned at the patient bedside. His fingers grasp the master controls at waist height and his arms relax into position. His feet rest lightly on the foot pedals which allow him to switch control between instruments. Above the bed, a large widescreen monitor shows a broad view of the operating field inside the patient's chest, offering the team real-time visualization of the procedure. As Dr. Sutter deftly manipulates the controls, the robot's arms move in tandem. On the monitor we see the surgical instruments inside the body respond, precisely translating Dr. Sutter's maneuvers into seamless, real-time surgical movements with a range of motion greater than that of the human wrist.



Philanthropy brought *da Vinci*® to Lankenau

In 2004, Lankenau Medical Center launched a fundraising initiative to bring the first *da Vinci*® system to our operating rooms. The acquisition of this \$1.6 million new technology was made possible with more than \$1.2 million in charitable gifts including grants of \$500,000 and \$300,000 from **The W. W. Smith Charitable Trust** and **The McLean Contributionship**, respectively; \$100,000 from **Harry and Evelyn Lieberman**; \$50,000 from Lankenau Trustee **Steve Berman** and his wife **Ginny**; \$25,000 from **Babe and Jack Grollman**; \$25,000 from **Eileen and Ira M. Ingerman**; \$22,500 from Emeritus Trustee **Fred Haab** and his wife **Gabrielle**; \$10,000 from Emeritus Trustee **Dan Green** and his wife **Florence**; \$10,000 from **Monette and Fred Robinson**; and \$10,000 from **Richard I. Shafritz**.

In 2011, as part of Lankenau's expansive Master Facility Project, Lankenau acquired two new *da Vinci*® Si surgical systems. Once again, this advance was made possible in part with philanthropic support from generous benefactors investing in the campus renaissance. Now, Lankenau has established a multidisciplinary center of excellence in robotic surgery across several service lines including urology, gynecology, gastroenterology, general surgery and thoracic surgery.



What seems like hundreds of gleaming, sterilized stainless instruments lie on a table covered with blue surgical drapes. At Dr. Sutter's request, Physician Assistant Anny Luong and bedside nurse Janet Reynolds, seated by the patient, exchange the surgical instruments through the robot's arms. The *da Vinci* robot comes with many kinds of tools – each with a specific surgical mission such as cutting, cauterizing, clamping, suturing and tissue manipulation. Under the powerful magnification of the video feed, the instruments appear bulky, but when removed from the body and viewed in plain sight, it becomes clear just how miniature they actually are. The robot effectively gives Dr. Sutter the ability to operate with much smaller tools than he could hold with his actual hands, lessening the impact on the extraordinarily delicate structures of the heart. Blood vessels, which are clearly visible on the screen, are only the width of lead in a lead pencil in reality; delicate tissues and membranes are grasped and cut with precision; stitches the width of an eyelash, sewn in precise locations.



I'm invited to take a look through the eyepiece on the surgeon's console. What had appeared on the room monitors as a 2D view within the chest wall transforms before me as my eyes adjust. The console enables a high-definition, 10X magnified, 3D viewing experience that provides true-to-life images of the patient's anatomy. Tissues, blood vessels, muscles and membranes

appear with crystal clear definition and natural color, and the depth of field is dramatically enhanced.

Back at the controls, Dr. Sutter precisely moves his hands to manipulate the camera to view another area within the chest. The robot's arms, tipped with surgical instruments, follow. On the monitor I see the heart beating. At many institutions utilizing a traditional open-chest approach to bypass surgery, a heart-lung machine is used to stop the heart so the surgeon can operate on a still and blood-free surface. The heart-lung machine sends oxygenated blood to the body and its vital organs while the heart lies still. At Lankenau, 95 percent of bypass surgeries – whether robot-assisted or traditional in approach – are done with a “beating heart,” reducing the amount of blood loss and the risk of stroke associated with using a heart-lung machine.

Time passes quickly as I watch Dr. Sutter and his team at work. Dr. Arathi Sambasivan, one of five specially-trained and certified cardiac anesthesiologists at Lankenau, continuously assesses the patient; monitoring and controlling his heart rate and rhythm, breathing, blood pressure, body temperature and body fluid



New Main Line Health System Chief

In May 2014, Konstadinos

A. Plestis, MD, joined Main Line Health and the cardiac surgery leadership

team of Drs. Scott Goldman and Francis Sutter, as the new System Chief of Cardiothoracic and Vascular Surgery at Lankenau Heart Institute. In his new position, Dr. Plestis oversees the ongoing clinical advancement of the Lankenau Heart Institute's Cardiothoracic and Vascular Surgery programs. Dr. Plestis, who most recently served as Director of Aortic Surgery and the Aortic Wellness Center at Lenox Hill Hospital in New York City, brings more than 20 years of cardiovascular surgical experience, specifically in aortic surgery, to his new role. As a nationally recognized leader in the field of cardiac surgery, Dr. Plestis maintains an active surgical practice focusing on the care of patients with complex aortic disease, including ascending aortic aneurysms, aortic root aneurysms, arch aneurysms, descending aneurysms, thoracoabdominal aneurysms, and aortic dissections, and complex valvular and coronary disease. Dr. Plestis is truly a physician at the forefront of the field of cardiac surgery. He has performed more than 1,000 surgeries both nationally and internationally and takes an active role in the instruction of other surgeons. He is committed to research and outcomes analysis and has made numerous contributions to peer-reviewed journals, participated in many clinical trials and frequently presented on aortic surgery at national and international conferences. The Lankenau Heart Institute at Lankenau Medical Center and Bryn Mawr, Paoli and Riddle Hospitals, now joins a select number of hospitals in the nation to offer an integrated approach for the care of patients with aortic disease.



balance, ensuring conditions ideal for a safe and successful surgery. Alli Schaus, a circulating OR nurse, is responsible for overseeing the entire OR away from the sterile field, coordinating efforts with the surgical team for the benefit of the patient. Sitting at the side of the patient in the center of the room, Janet and Anny continue to work cohesively, exchanging the needed instruments, and supervising the robot arms and tools being utilized. The intricate procedure moves forward *(continued on page 66)*



Learning to Listen

HE IS NOT ALIVE, YET HE HAS A PULSE.

HIS ARTERIES IN THE NECK, ARMS AND LEGS CHANGE SHAPE.

HIS BREATHING VARIES AND HIS LUNGS ARE AUDIBLE.

HIS HEART BEATS.

In fact, “Herman” - Lankenau Medical Center’s cardiopulmonary patient simulator - has a heart, lungs and arteries that will realistically simulate more than 30 cardiovascular conditions ranging from the most common to rare, complex issues. But with rapidly evolving screening and diagnostic testing, why is this sophisticated mannequin so important for physicians in today’s world?

“Sometimes technology makes physicians complacent,” says Lankenau’s Cardiovascular Disease Fellowship Program Director Dr. James Burke. “We forget how important our senses and our own physical assessment of the patient are to our training.” Before imaging technology including echocardiography, nuclear medicine and stress testing became so accessible and depend-

able, physicians had to rely on their hands, ears, and eyes to evaluate symptoms of heart conditions such as murmurs, mitral regurgitation and atrial stenosis. In the past, before the availability of simulation, physicians-in-training relied on the rare occasions when they were able to observe patients with unusual heart problems. With access to a virtual learning device such as Herman,

medical students, residents and fellows at Lankenau are given the opportunity to experience, and therefore recognize, the physical manifestations of various heart conditions in a single class setting.

By mimicking such a wide variety of cardiac functions of the human body at the touch of a button, Herman creates a training exercise more realistic than a classroom lecture, and more accessible than evaluating patients at the bedside.

The true value of Herman and other mannequins lies in the degree to which such educational tools promote patient safety and satisfaction. Patients hope to benefit from the diagnostic expertise of the physician and their listening ear. As a physician, one hopes to go well beyond the Hippocratic Oath to do no harm, but also to provide care that comforts and heals, which requires a greater understanding of the relationship between doctor and patient.

There's more to a physical assessment than listening to someone's body. "When a doctor enters a patient's room - whether that is in a hospital or a medical office - the doctor's presence, bedside manner and touch can convey compassion and an understanding of a person's humanity," says Lankenau cardiologist Dr. Irving Herling, who has decades of experience working with cardiovascular simulators. "It's crucial that a patient feels respected as a unique person and not just a number, a disease, or a case. Gaining experience through interactions with virtual learning devices can help physicians-in-training develop a heightened awareness of the importance of the bedside encounter from the (continued on page 67)

The Annenberg Simulation Center

Lankenau trains more than 100 new physicians each year through nationally ranked residency and fellowship programs supported through the Annenberg Center for Medical Education. An integral part of Lankenau's medical education training program is the Walter and Leonore Annenberg Simulation Center. The core of the Simulation Lab's mission is to enhance patient safety and best practices for all clinicians. The availability of state-of-the-art equipment and virtual learning devices - such as mannequins whose technology can simulate patient symptoms and disease states - facilitates the acquisition of diagnostic and communication skills and procedural techniques away from the patient's bedside. Practicing with these highly-advanced educational tools promotes patient safety and ultimately helps to deliver quality patient care at the bedside.



Cardiovascular Fellowship and Surgical Training Opportunities

Lankenau Medical Center's highly sought-after cardiovascular program offers specialty fellowships in cardiovascular disease, interventional cardiology and clinical cardiac electrophysiology. This three-year program attracts more than 500 applicants from across the U.S. for the four first-year positions. Fellows gain extensive experience within all three areas using the most advanced technology and latest procedures available for the full range of heart and vascular conditions. All of Lankenau Medical Center's cardiology fellowships are accredited by the Accreditation Council for Graduate Medical Education and offer systematic training to meet the necessary background requirements for certification by the American Board of Internal Medicine in Cardiovascular Diseases, Clinical Cardiac Electrophysiology and Interventional Cardiology.

Lankenau also serves as a national and international training site for cardiac surgeons interested in learning surgical approaches including off-pump CABG, robotic-assisted CABG, minimally invasive mitral valve repair and complex aortic surgery. Guests from more than 175 medical centers, 275 cardiac surgeons and industry partners from throughout the world have come to observe the expertise of Lankenau's cardiac surgeons. With growing pressure for funding in order to sustain graduate medical education programs, several Lankenau Medical Center benefactors have stepped forward in recent years establishing endowments to support a variety of Fellow positions in perpetuity.

Eileen and Ira M. Ingerman named Lankenau Medical Center as beneficiary of a \$600,000 bequest through a Charitable Remainder Unitrust to establish the *Eileen and Ira Ingerman Chief Fellow in Cardiovascular Diseases*.

Barbara Brodsky established *The Barbara Brodsky Fellowship in Clinical Cardiac Electrophysiology* with a \$500,000 endowment made in honor of Dr. Peter R. Kowey.



Above group photo L to R. Back row: Jeffrey A. Wuhl, MD, Cardiologist; Roberto Rodriguez, MD, Cardiac Surgeon; Eric M. Gnall, DO, Interventional Cardiologist; Paul M. Coady, MD, Interventional Cardiologist; Scott M. Goldman, MD, Chairman of Surgery, Main Line Health. Front row: Sandra V. Abramson, MD, Director of Cardiovascular Imaging, Main Line Health; Mary "Glee" Young; William Young; Lisa Igdibashian, MSN, CRNP, Heart Valve Coordinator

100 Lives Changed Forever

Monday, September 24, 2012. The patient is wheeled out of the procedure room. When she awakens, she rejoices in her new-found good health. Behind closed doors, a team of more than 20 celebrates a milestone achievement.

In early 2012, Lankenau Medical Center was among an exclusive group of U.S. hospitals chosen to perform TAVR (trans-catheter aortic valve replacement) with the Edwards SAPIEN heart valve, the first FDA-approved valve for TAVR therapy. This complex but minimally-invasive procedure allows, for the first time, a diseased aortic valve to be replaced without open-heart surgery. Instead, a small incision is made in the leg or chest without breaking open the breast bone. A valve, crimped on a catheter, is threaded through blood vessels to the heart and then expanded to fit on top of the existing diseased valve by inflating a small balloon.

Mary "Glee" Young was Lankenau's first TAVR patient. She recently returned to Lankenau along with her husband Bill, to tell her story and express her gratitude and appreciation for the expertise of the TAVR team, just as it celebrated a new milestone - the team's 100th procedure.

"I had known about my aortic stenosis for a while," says Glee, whose energetic spirit does not betray her 84 years. Aortic stenosis is a condition where the aortic valve narrows, reducing the ability of blood to leave the heart and circulate through the rest of the body. This condition develops slowly over time and as it worsens

The Hybrid Procedure Room

TAVR procedures are complex and require a highly-skilled cardiovascular team and a specially-designed and equipped Hybrid Procedure Room. Lankenau's Hybrid Room, housed in the Cardiac Intervention & Electrophysiology suite, is outfitted with advanced surgical equipment and sophisticated large monitors using video technology needed to observe catheter insertion and movement. The room layout is optimized for transcatheter-based procedures, such as TAVR, and can accommodate the large, collaborative team from both the cardiac interventional lab and the operating room.

The Hybrid Room at Lankenau was made possible with the generosity of an **anonymous benefactor** who is grateful for the successful open-heart surgery he underwent at Lankenau in 2003, where he personally experienced Lankenau's expertise in the treatment of cardiovascular disease. Prior to his gift of \$375,000 for the Hybrid Procedure Room, this grateful patient made gifts totaling more than \$50,000 in support of the cardiothoracic patient experience.

with age, patients require corrective surgery to ensure the heart will continue to deliver rich, oxygenated blood to the body's vital organs. However, some patients, because of certain risk factors, are deemed inoperable or too high-risk to undergo valve replacement through open-heart surgery. Research has shown that, without valve replacement, 50 percent of patients will not survive longer than two years after the onset of significant symptoms of aortic stenosis, and many suffer from a diminished quality of life. "I was on oxygen 24 hours a day, seven days a week," Glee remembers. She had lost the energy she once had to participate in activities such as baking for her church and teaching at the senior center. Glee's Lankenau Heart Institute cardiologist at Paoli Hospital, Dr. Leo Podolsky, told her to meet with the Lankenau Medical Center surgical team, to discuss her options. Having heard about TAVR from a cable TV program, Glee went to Lankenau with high hopes.

A highly-sophisticated "hybrid" procedure, TAVR requires the collaboration of a team which includes interventional cardiologists and cardiac surgeons alongside anesthesiologists, cardiac

imaging specialists, specialized cardiac and operating room nurses, perfusionists, physician assistants, technologists and a valve coordinator. Post-procedural care also involves critical care nurses, physical therapists, dieticians and social services representatives among others. Although TAVR is not an appropriate treatment option for everyone, it offers a new hope for a select group of individuals, like Glee, who were considered

inoperable and too high-risk for the traditional surgical approach. Glee trusted the specialized cardiac team at Lankenau to get the job done successfully. "I knew it was a new procedure, but I also knew that meant the physicians would be newly-trained and very careful. I wouldn't have come to Lankenau unless I had complete confidence in the team."

Glee underwent a comprehensive
(continued on page 67)



From One to One Hundred

Josette Brun was the 100th patient to undergo TAVR at Lankenau. Prior to the procedure, she had been experiencing trouble breathing as a result of her aortic stenosis. Like Lankenau's first TAVR

patient, Mary "Glee" Young, Josette is celebrating her better quality of life post-procedure. The invasive surgery and scars she was worried about? She's happy to say they weren't an issue. "I was so happy and shocked. They didn't have to cut me open at all, and I don't have any scars—nothing. I feel like a new person and like I have a new lease on life," Josette says. A Wynnewood resident who calls Lankenau her 'second home,' Josette is excited to see the progress Lankenau has made in recent years. During her surgery, she stayed in the Heart Pavilion. "I feel like I'm in another world at the Heart Pavilion. It's very impressive! It's full of people who are so kind and really care; everyone there is so warm and very friendly. I recommend it to everybody."



Pay Attention to Leg Pain

MUSCLE CRAMPS MAY BE A SIGN OF PERIPHERAL ARTERIAL DISEASE

If you've ever had a muscle cramp, you know it can be painful. Now imagine your hips, thighs, or calves cramping whenever you walk or exercise. Leg pain is a common symptom of peripheral arterial disease (PAD), a serious condition that occurs when fatty buildup in the arteries blocks circulation to the legs and feet. Yet the vast majority of people with PAD don't know they have it.

Should You Be Screened for PAD?

To diagnose peripheral arterial disease (PAD), doctors perform a physical exam and a simple test that compares the blood pressure in your feet with the blood pressure in your arms to see how well the blood is flowing. Talk with your doctor about screening if you:

- Are younger than 50, have diabetes, and have one additional PAD risk factor, such as smoking, high blood pressure, or high cholesterol
- Are 50 to 65 years of age with a history of smoking or diabetes
- Are older than 65
- Have pain in your legs with exertion or when resting
- Have known coronary, carotid, or renal artery disease

Knowing the Symptoms

The classic PAD symptom of leg pain occurs with exercise and goes away with rest. Patients may also have sores on their feet that heal slowly. A leg or foot may constantly feel cold because of poor circulation. "Unfortunately, PAD is an underdiagnosed disease," says Antonis Pratsos, MD, an interventional cardiologist at the Lankenau Heart Institute at Bryn Mawr Hospital. "Up to 50 percent of people with PAD don't have symptoms. Many who do attribute them to something else, like arthritis. Also, because PAD tends to occur in older people, who often have other health problems, doctors might overlook it." "Untreated PAD can lead to complications such as gangrene and amputation," adds Amid Khan, MD, an interventional cardiologist at the Lankenau Heart Institute at Lankenau Medical Center. "People with PAD also have a five-times greater risk for heart attack and a two-to-three-times greater risk for stroke."

Top Treatment Options

Doctors at the Lankenau Heart Institute are experts at diagnosing and treating PAD. "When

found early, PAD often can be managed with a supervised exercise program, medication, and lifestyle changes such as lowering high blood pressure and eating a healthier diet," says Vincent DiGiovanni, DO, vascular surgeon at Lankenau Medical Center and Riddle Hospital. For severe disease, surgical treatment may include:

- Opening the clogged artery with balloon angioplasty and implanting stents to keep the blood vessel open
- Using a catheter to insert special devices into the artery to sand, shave, freeze, scrape away, or vacuum out plaque
- Performing bypass grafting surgery— using a blood vessel from another part of the body to enable blood to flow around the blockage

You can take steps today to lower your risk for PAD. "Getting regular exercise is important," Dr. Pratsos says. "Make sure to control diabetes, high blood pressure, and high cholesterol. And if you smoke — quit."



The simple test that can **save** your life.

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You will receive a personal evaluation of your circulation and vascular health,
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Carotid Artery Ultrasound

shows the flow of blood in the carotid (neck) arteries that go to the brain. A buildup of cholesterol (plaque) in these arteries can increase the risk of stroke.

Ankle Brachial Index (ABI)

tests for blockages in the arteries that go to the legs. These blockages are called peripheral arterial disease (PAD) and can increase the risk of heart attack.

Abdominal Aortic Aneurysm (AAA)

Screening tests for an expansion (aneurysm) of the abdominal aorta, the main blood vessel that carries blood from the heart to the rest of the body. As the aneurysm expands, it can burst and result in sudden death. Aortic aneurysms usually do not have symptoms.

Peak Systolic Velocity (PSV)

measures the rate of flowing blood through arteries and can determine the severity of blocked arteries.

Heart Rhythm Electrocardiogram (EKG)

provides an image of the heart's electrical activity, which can predict irregular rhythm and heart attack.

Body Mass Index (BMI)

is a formula used to determine obesity. BMI can predict the risk of high blood pressure, stroke, heart attack and diabetes.

Blood Pressure measures the work that the heart performs by driving the flow of blood throughout the body. High blood pressure can lead to kidney failure and accelerate hardening of the arteries.

The information is intended for general guidance only and is not medical advice. The information is not intended as a recommendation for specific situations. The participant should always consult a qualified physician for specific advice.



Lankenau Heart Institute
Main Line Health

FOR MORE INFORMATION OR AN APPOINTMENT:
1.866.CALL.MLH (1.866.225.5654)
MainLineHealth.org/Angioscreen



HOSPITAL RANKINGS



Truven Health Analytics' 100 Top Hospitals® (2014)

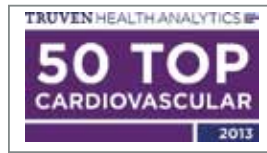
Of the nearly 3,000 U.S. hospitals evaluated on their hospital-wide performance in areas such as clinical care, outcomes, quality, safety, efficiency, patient satisfaction, and financial stability, Lankenau ranked among the top 5% in the nation and was one of only five hospitals in the state making the Top Hospitals list. This is the third year Lankenau has received this award.



US News & World Report's Best Hospitals (2014-2015)

US News & World Report ranked Lankenau as the 7th best hospital in the entire state of Pennsylvania and the 4th best hospital out of almost 100 institutions in the Philadelphia metro area. Lankenau is also recognized for high performance in specialties including cancer, cardiology and heart surgery, ear, nose and throat, gastroenterology and GI surgery, geriatrics, gynecology, nephrology, neurology and neurosurgery, orthopedics, pulmonology, and urology. Lankenau also received a national ranking as one of the top 50 hospitals for Diabetes and Endocrinology. Only three percent of the almost 5,000 hospitals analyzed earned a national ranking. US News & World Report recognizes hospitals that excel in treating complex patients.

CARDIOVASCULAR ACCOLADES & ACCREDITATIONS



Truven Health Analytics' 50 Top Cardiovascular Hospitals® (2014)

Receiving this distinction for the seventh consecutive year, Lankenau is the only hospital in the region and one of only two hospitals in the state to have made this year's list. This annual quantitative study evaluates more than 1,000 U.S. hospitals, selecting the best providers of cardiovascular services in the nation, based on the outstanding care and new standards in excellence that the top 50 bring to the health care industry.

The Joint Commission's Gold Seal of Approval & Top Performer on Key Quality Measures®



Lankenau Medical Center was named a Top Performer by The Joint Commission for the second year. Lankenau is being recognized for exemplary performance in using evidence-based clinical processes that are shown to improve care for heart attack, heart failure, pneumonia and surgical care. In addition, Lankenau has received the prestigious Gold Seal of Approval for Stroke Care.



American Heart Association's "Get With The Guidelines®" Gold Plus Quality Achievement Award for Stroke Care

This award, which Lankenau received for the fourth consecutive year, recognizes our commitment and success in implementing a higher standard of care by ensuring that stroke patients receive treatment according to nationally accepted guidelines.



American Heart Association's "Mission: Lifeline® Receiving Center" Silver Achievement Award

The Mission: Lifeline® program acknowledges the implementation of specific quality improvement measures outlined by the AHA for the treatment of patients who suffer severe heart attacks.

The Lankenau Heart Institute is one of the top-performing clinical programs for complex heart disease in the country. Few heart programs can rival the superior outcomes of the patients we treat with serious heart conditions. The Lankenau Heart Institute has been recognized nationally with the following cardiovascular awards and accreditations:



American Association of Critical-Care Nurses' Silver Beacon Award for Excellence

This award was created by the AACN to recognize individual nursing care units that distinguish themselves in the care of patients and their families. The units that are recognized by this award demonstrate exceptional care through improved outcomes and overall satisfaction. Lankenau's Cardiothoracic Intensive Care Unit (CTICU) received this three-year designation in 2012. Shortly thereafter, our Intensive Care Unit (ICU) also received the same accolade.

BlueCross BlueShield Association Blue Distinction Center+ for Cardiac Care®



The Blue Distinction Center program evaluates hospitals on their ability to deliver high quality and safe specialty care based on criteria that directly impact patient results – e.g., surgical team expertise and a history of better outcomes for patients. Hospitals receiving a Blue Distinction Center+ designation are also measured on how efficiently they deliver this high-quality patient care.



Society of Cardiovascular Patient Care Accredited Chest Pain Center with Percutaneous Coronary Intervention

Hospitals receive SCPC accreditation after rigorous evaluation and subsequently meeting a high level of expertise in their ability to assess, diagnose and treat patients who may be experiencing a heart attack.

American Association of Cardiovascular and Pulmonary Rehabilitation Certified Outpatient Cardiac Rehabilitation Program



Through the Outpatient Cardiac Rehabilitation Service at the Lankenau Heart Institute, patients who have had a recent heart attack, angina attack, heart failure, open-heart surgery or angioplasty receive the specialized care they need to return to normal activities.

Intersocietal Accreditation Commission (IAC) Accreditation in the areas of adult stress, adult transeophageal and adult transthoracic echocardiography



An accredited echocardiography lab has been proven to provide high-quality, reliable echocardiographic diagnostic evaluations. Accredited labs are constantly performing self-assessments, as renewal is required every three years.

Consumer Reports Top Score in Heart Bypass Surgery

Lankenau Medical Center recently earned an above average rating from Consumer Reports for heart bypass surgery in the publication's national "Where should you go for heart surgery?" report, featuring ratings of more than 400 hospitals in the country. Lankenau was one of only six hospitals in Pennsylvania, and the only one in the Philadelphia region, to earn a top score (above average) in heart bypass surgery.



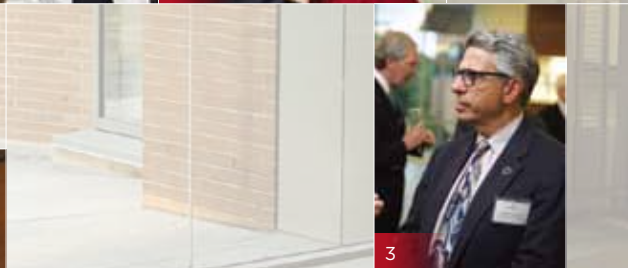
The Society of Thoracic Surgeons Three-star Rating

The Society of Thoracic Surgeons reports heart surgery outcomes, rating Lankenau in the highest quality tier for cardiac surgery.

The Heart of Lankenau Dinner Series

The *Heart of Lankenau* dinner series brings together patients, community members, physicians and friends of Lankenau Medical Center to learn about the very latest updates from our cardiovascular services program. In June 2013, the *Heart of Lankenau* program featured Dr. Paul Coady, Interventional Cardiologist; Dr. Paul Gilman, Chief of Hematology/Oncology; Dr. Irv Herling, Director of Clinical Cardiology for Lankenau and Main Line HealthCare; and Dr. Frank McGeehin, Chief of Clinical Cardiology for Main Line Health. Topics included: an update on Transcatheter Aortic Valve Replacement; the newest addition to our Simulation Center – Herman (p.48) the Cardiopulmonary Patient Simulator; and the development of a cardiology-oncology program.

1. Peter Havens, Trustee, Lankenau Medical Center (LMC) Foundation and Main Line Health (MLH), Chairman of the Board, Lankenau Institute for Medical Research; and Alice Chase, LMC Women's Board immediate past president
2. Barbara Scorzetti, President, Ladies Aid Society auxiliary
3. Peter R. Kowey, MD, Chief, Cardiovascular Disease, MLH and William Wikoff Smith Chair in Cardiovascular Research
4. Barbara and Alan Boroff; and Debbie McKenna
5. Mary Smith and Peter MacAlpine
6. Frank McGeehin, III, MD, Chief, Clinical Cardiology, MLH; Debbie Fine; Howard Krakow; and Evelyn Lieberman
7. James "Skip" Oliver, Mike Morris and John Zaro, MD
8. Jane Herling and Irving Herling, MD; with Dr. Robert and Lisa Segal
9. Anne and Adam Herzig
10. Sherrin Baky, Women's Board member; William Nestler; and Barbara Evans, Women's Board member



11. Paul Coady, MD
12. Paul Gilman, MD, Chief, Hematology/Oncology, LMC
13. Lydia and Dr. Vsevolod Kohutiak
14. Speakers Paul Gilman, MD; Phil Robinson, President, LMC; Irving Herling, MD, Director, Clinical Cardiology, LMC and Main Line HealthCare; Frank McGeehin, III, MD; and Paul Coady, MD, Interventional Cardiologist, LMC
15. Marie and the late Peter Dooner



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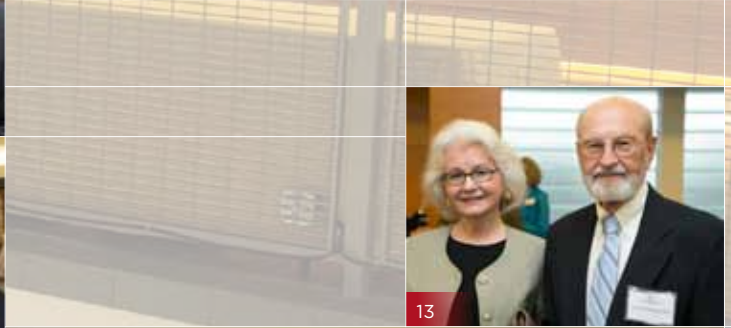
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Focus on Philanthropy

THE LIFE YOU LIVE FOR OTHERS
IS A LIFE NOT LIVED IN VAIN

—John D. Lankenau

Lankenau Medical Center gratefully acknowledges the generosity of the individuals, foundations and corporations listed below. As a non-profit entity, Lankenau relies on charitable contributions to further its mission of providing the superior patient experience through patient care excellence, innovative research and medical education. These gifts and grants are some of the significant contributions received over the past year in support of our endeavors.

A leadership gift dedicating the Brodsky Bridge – linking the Heart Pavilion to Visitor Garage ‘D’ – was made by **Barbara Brodsky** who, along with her daughters **Lori Brodsky** and **Margie Brodsky**, dedicated the Bridge in tribute to their late husband and father, **Harvey Brodsky**. Mrs. Brodsky also established the *Barbara Brodsky Endowed Fellowship in Clinical Electrophysiology* in gratitude to Dr. Peter R. Kowey. Further, she made another very significant commitment to dedicate the *Barbara Brodsky Suites*, an eight-bed concierge unit and lounge at Lankenau, scheduled to open in fall 2014. Mrs. Brodsky’s total campaign support now stands at an extraordinary **\$2.5 million**.

The Charter Foundation made a contribution of \$285,000 towards the Foundation’s joint **\$1.5 million** pledge with LMC Trustee **Joseph Gordon** to

establish an Endowed Chair at LMC. Mr. Gordon made an additional contribution of **\$10,000** to support Lankenau’s highest priority needs.

LMC and Lankenau Institute for Medical Research (LIMR) Trustee **Wistar Morris** and his wife **Martha** made contributions totaling \$400,000 through **The Cotswold Foundation**: \$200,000 towards their **\$1 million** Master Facility Project (MFP) pledge, **\$100,000** to support the research endeavors of LIMR, and **\$100,000** for Lankenau’s highest priority needs.

39 Lankenau physicians and their spouses made pledges of \$25,000 to LMC, becoming members of Lankenau’s newly-established physician/scientist giving society, the *1860 Society*. In total, the members of the *1860 Society* have contributed more than **\$1.1 million** in support of a variety of LMC programs including fellowships, capital

investments and research. For a list of the 38 Charter Members, see page 68.

LMC and Main Line Health (MLH) Trustee and LIMR Board Chairman **Peter Havens** and his wife **Louise** made a gift of more than \$198,000 towards their **\$1 million** commitment to establish *The Havens’ Family Endowment for Scientific Research*.

MLH Trustee Patricia Holloway and her husband **Gary** donated almost \$200,000 in stock to LMC towards fulfillment of their **\$1 million** pledge in support of the MFP. This latest gift brings their total pledge payments received so far to more than \$800,000.

The Women’s Board of Lankenau Medical Center and its auxiliaries contributed more than \$336,000 in support of Lankenau’s MFP and patient programs and services in fiscal year 2014. Part of this contribution marked a final

installment, fulfilling the Women's Board's **\$1 million** commitment to the MFP in dedication of LMC's Comprehensive Breast Center.

The W. W. Smith Charitable Trust made its second \$125,000 installment towards a five-year **\$625,000** grant to support innovative cancer research projects at LIMR.

Pam and Tony Schneider made a gift of \$100,000 through the **PTS Foundation** towards their **\$500,000** pledge in support of Lankenau's MFP.

The Delema G. Deaver Fund made a gift of more than **\$281,000** to support children's services at LMC.

Mary L. Smith made a gift of **\$250,000** to help fund the LMC Hyperbaric Oxygen Therapy Center as part of improvements to Lankenau's Wound Healing Center.

Mary Lou and **John Chappell** contributed \$10,000 to complete their **\$250,000** pledge in support of the MFP.

The Estate of Dorothy Merritt Jones Shumen made a final distribution of more than **\$230,000** designated in support of LIMR.

Karen and Dennis Marlo made a gift of almost \$50,000 to Lankenau's MFP, bringing their total contributions

to **\$150,000**. The Marlos made an additional gift of **\$8,500** through United Way to support highest priority needs at LMC and LIMR.

Fred and Monette Robinson made a contribution of \$30,000 towards their **\$150,000** pledge in support of Lankenau's MFP.

Rena and Joshua Kopelman contributed \$31,250 through **The Kopelman Foundation** towards their **\$125,000** pledge to support the MFP.

More than **650 LMC and MLH Employees** participated in LMC's 2014 Employee Giving Campaign, choosing to support our institution's programs and services with their personal treasure in addition to the time and talent they give each day. In total, more than **\$113,000** was raised for LMC as part of more than \$426,000 raised across all MLH entities.

Sandy and Arnie Galman made a gift of more than **\$101,000** to the Campaign for Lankenau Medical Center.

Emeritus Trustee **Edward L. Jones, Jr.** and his wife, Women's Board member **Meredith**, made a \$20,000 installment on their **\$100,000** MFP pledge and contributed an additional **\$5,000** to support the work of LIMR.

The Estate of Muriel G. Reich made a distribution of almost **\$105,000** towards the Hamper Shop Auxiliary of the Women's Board of Lankenau Medical Center.

An **anonymous** donor made a stock contribution valued at more than **\$100,000** to Lankenau's *Patient Experience* fund in support of enhancing patient comfort.

Pamela and David Berkman contributed \$20,000 towards their pledge of **\$100,000** in support of the MFP.

LMC Foundation Trustee **Steve Berman** and his wife **Ginny** made a gift of \$20,000, fulfilling their **\$100,000** MFP pledge in support of the Comprehensive Breast Center and Heart Pavilion.

The Conicelli Management Group, on behalf of **Dominic Conicelli, Sr.** made a \$20,000 payment towards his **\$100,000** pledge to the MFP.

The **Cordell Family Foundation**, on behalf of **Kenny and Kathy Cordell** made gifts totaling \$40,000 towards a larger commitment of **\$100,000**, including a tribute to Drs. Frank McGeehin and James Thornton.

Emeritus LMC Trustee **Daniel Green** gave \$20,000 to help fund a research project



Focus on Philanthropy *(continued)*



to be conducted by Lankenau Institute for Medical Research President Dr. George Prendergast. This gift is part of a **\$100,000** MFP pledge.

Drew Milstein brought his total commitment to the MFP to **\$100,000** with a new pledge of \$86,000.

Wendy and Russell Palmer contributed more than \$28,000 towards their **\$100,000** MFP pledge.

JoAnn and Richard Campion donated a gift of stock valued at more than \$20,000 which, along with a matching gift of \$5,000, was designated to establish the *Michael A. Manko, MD Senior Resident in Internal Medicine* position at LMC. More recently, the Campions made an additional contribution of more than \$35,000, along with a matching gift of \$5,000 for a total of more than **\$65,000** designated to the Residency in the past 12 months.

Medtronic, Inc. awarded LMC two grants totaling **\$50,000** to help support the expenses of a fellow in Adult Electrophysiology and a fellow in Interventional Cardiology for academic year 2013-2014. More recently, Medtronic made another gift of **\$18,000** directed for this cardiovascular educational purpose.

Boston Scientific Corporation awarded LMC two grants totaling **\$50,000** to support a Rhythm and Electrophysiology Fellowship and an Interventional Cardiology & Peripheral Interventions Fellowship for academic year 2013-2014.

St. Jude Medical, Inc. granted LMC **\$50,000**; \$25,000 to support the Interventional Cardiology Fellowship and \$25,000 to support the Clinical Cardiac Electrophysiology Fellowship in academic year 2013-2014.

The Clayman Family Foundation, with the encouragement of Trustee **Stephen A. Cohen**, made a gift of **\$25,000** to support Cardiovascular Research at LMC and pledged an additional **\$21,365** towards Cardiovascular Medical Education.

Aetna, Inc. contributed **\$41,000** to support the Health Career Academy project at LMC – an educational enrichment program for inner-city high school students, led by Dr. Barry Mann, MLH Chief Academic Officer.

Andrea Cavitolo Kantor made a second gift of \$20,000 through the **Andrea Cavitolo Foundation** in fulfillment of her **\$40,000** pledge to be used for Dr. Carp's breast cancer research and his associates' BRCA genetic research.

President's Advisory Council member **Eugene Dubay** and his wife **Michelle** made a gift of \$20,000 to the LMC Foundation, bringing their fiscal year 2014 contributions to more than **\$36,000**.

The Deborah J. McKenna Foundation granted more than **\$31,000** to support the research of U. Margeretha Wallon, Ph.D. at LIMR.

The William Albert & Eugenie Hummel Sullivan Fund of The Philadelphia Foundation contributed more than **\$25,000** to LMC to support care for underserved patients.

The Mills Family made a gift of **\$25,000** in support of the Heart Pavilion.

Mr. and Mrs. John B. Neff gave **\$25,000** through their IRA to support cardiovascular services at LMC.

P. Agnes Inc., RTKL and **Stantec** each contributed **\$25,000** to serve as sponsors of "A Visionary Celebration." For photos from the event see page 62.

Ellen and Nolan Perin made a **\$25,000** commitment and first \$5,000 installment in support of cardiovascular research conducted under the leadership of Dr. Peter Kowey.

The Campaign for Lankenau

What began as a drive to help renovate the Lankenau campus through the Master Facility Project (MFP) resulted in the largest capital investment in the history of Lankenau Medical Center (LMC) and Main Line Health (MLH). Ultimately, \$465 million was invested in the expansive construction and renovation project which transformed many areas across Lankenau and brought us the new Heart Pavilion. When the conclusion of Phase I was celebrated at A Visionary Celebration (see page 62), a full \$21.5 million in funds to support the MFP had come from philanthropy, including an unprecedented number of gifts of \$1 million or more. Those funds augmented the \$79 million committed

by the LMC Foundation, comprised of Lankenau philanthropy and MLH assets, bringing philanthropic support to more than \$100 million – by far the largest effort in Lankenau’s storied 154-year history. Today, the names of those contributing \$100,000 or more to the Campaign can be found on Lankenau’s new campaign leadership donor wall, proudly on display in the atrium of the Heart Pavilion.

Now, as the MFP winds down and we celebrate the first anniversary of the Heart Pavilion, new priorities and opportunities on the horizon demand our attention. In Phase II of our fundraising drive, LMC is turning its attention to creating Centers of Excellence – service lines and programs that attract the top

physicians, provide superior medical education for the next generation of physicians, generate the most innovative research and offer patients the most leading-edge care. And we must combine that with a steady focus on the entire patient experience: the consideration of our patients as unique individuals, whose whole person – physical, spiritual, emotional and social – is considered and respected. Only by attending to these dual goals can we continue to integrate the unparalleled patient care, innovative research and academic excellence that have made Lankenau one of the country’s premier destinations for health care.



A Visionary Celebration

ON OCTOBER 30, 2013, 200 community leaders, trustees, donors, employees, physicians and friends of Lankenau Medical Center gathered together at the Barnes Foundation in Philadelphia for *A Visionary Celebration*. The event was aptly named as it was a celebration of the visionary achievements of Lankenau's Master Facility Project; a moment to recognize the generosity of those who have given their personal treasure to help these achievements come to fruition; and an opportunity for Lankenau President Phil Robinson to share his vision for the *new* Lankenau - all while being surrounded by visionary and masterful works of art.

The dinner at the Barnes marked a pivotal moment in Lankenau's history. With the opening of the Heart Pavilion, the Master Facility Project (MFP) at Lankenau begins to wind down. What began several years ago as a campaign to support a capital project has grown into a fundraising drive that has ushered in a total renaissance for Lankenau. The MFP's many elements went beyond bricks and mortar to include kick-starting new research initiatives and establishing educational programmatic support for years to come.

Now, in Phase II and with new and enhanced facilities and infrastructure in place, our focus is shifting to the services we offer - our Centers of Excellence, and the consideration of the entirety of the patient and family experience - including the physical, spiritual, emotional and social elements.

With great pride, Lankenau Trustee and Chair of the Chairman's Campaign Council Peter H. Havens announced that, at the conclusion of Phase I, the campaign had generated close to \$22 million in cash and pledges. This remarkable achievement surpassed any campaign total in Main Line Health and Lankenau history. It included nine gift units of \$1 million or more and almost \$5 million in commitments from the Lankenau Medical Center Foundation Board.

1. Patrick and Victoria Pasquariello; with Erica and Dave Lamontagne
2. Evelyn Lieberman; Patricia Wong, MD; and Barbara Brodsky
3. Lankenau Medical Center (LMC) Foundation Trustee Barbara and David Seegul; Meredith Marks and John Marks, MD
4. Lawrence L. Livornese, Jr., MD, Dorrance H. Hamilton Chair of Medicine; Marilyn Howarth, MD; Bambi Siegfried and Jay Siegfried, MD, President, Medical Staff, LMC
5. Artist Val Rossman creating a piece capturing the evening which is now part of the permanent art collection on display at Lankenau.
6. John and Deborah Hetrick
7. Tilda and Dr. Barry Mann speak with Drs. Christine and Jonathan Stallkamp
8. Lankenau President Phillip D. Robinson
9. Francis P. Sutter, DO; and Lynne Jones





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10. Alice Chase, immediate past president, LMC Women's Board; and Audrey Kese, President, LMC Women's Board

11. Robert and Lisa Segal; and Marissa C. Weiss, MD

12. Matt and Sheila Vegari; with Barbara Caccia and David N. Vegari, MD

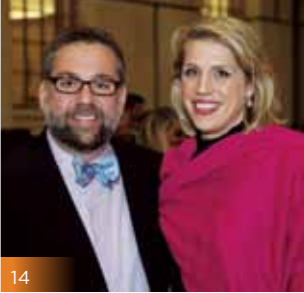
13. Speakers Jay Siegfried, MD; Peter Havens, Trustee, LMC Foundation and MLH; Alfred Putnam, Chair, LMC Foundation; Jack Lynch, President & CEO, MLH; and Phil Robinson, President LMC.

14. William D. Surkis, MD; and Nicole Otto Surkis, MD

15. Sharon Latchaw Hirsh, PhD, President's Advisory Council member



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From the Archives: The Hospital of the Future *(continued from page 21)*



Recognizing how quickly medicine was advancing, a consulting architect wrote “The American hospital fifty years from now will be as different in design from that of today as an escalator is from a rope ladder.” Sixty years later, technology has experienced a revolution; patient comfort and privacy has become paramount to healing and there are more

treatment options than ever before. But despite the radical developments of the past six decades, some things remain remarkably similar.

In 1953, the new hospital was largely made possible by an ambitious fundraising campaign with a goal of \$6 million. At the time, it was the largest single public appeal ever undertaken by a

Philadelphia hospital, and the first time in 90 years that Lankenau had sought capital funds in a general campaign. Lankenau’s campaign publication declared: “Here is a bold departure from the conventional community hospital... a new dream representing an ambitious plan to help create and sustain through services, research and education -- a healthier nation.”

Sixty years later, Lankenau maintains its commitment to patient care, innovative research and academic excellence. Our campus transformation and new Heart Pavilion were made possible, in part, by the more than \$21 million in philanthropy, invested into the institution by members of our community. These dedicated individuals and foundations recognize that, today, Lankenau continues its position as a leader in the region in health-care and is once again the Hospital of the Future.

Heart Rhythm Research at Lankenau Heart Institute *(continued from page 33)*



being conducted in 10 countries and will compare standard drug therapy to catheter ablation to determine how these two approaches save lives and relieve patient symptoms. An estimated 50,000 to 60,000 atrial fibrillation ablations are performed in the United States every year, but we do not completely understand who should receive this procedure and why. Findings from CABANA could have a ripple effect on patient care as well as future investigations.

What all clinical research endeavors

at Lankenau Heart Institute share is that integral connection to education and patient care. Our studies pursue different questions and progress at different paces, but each advances our knowledge of atrial fibrillation and cardiovascular disease, and contributes to our mission — delivering the very best care to all of our patients.

For a list of arrhythmia-related and all other cardiovascular clinical trials visit www.mainlinehealth.org/heart and click on “Clinical Trials.”

A Lifestyle Intervention *(continued from page 43)*



Lankenau Medical Center works with more than 150 new patients each year, conducting close to 3,000 individual sessions annually. Extended hours help accommodate the often busy work schedules of patients. “We see our patients two to three times a week for three to four months,” says Dianne. “During that time, we build a lasting relationship with our patients and their families, tailoring a rehab program to fit their specific needs.” This individualized approach is broad yet detailed in nature, fostering a greater understanding of a person’s heart condition and current medications, as well as offering diabetes counseling, nutrition education and stress management. “We help them to have a greater understanding of what happened and why, and then coach them through an important, transformational time in their lives,” says Dianne. “Under our guidance, our patients regain their strength, then learn how to make the healthy choices that will become as routine as brushing their teeth.”

The results are clear: patients enrolled in cardiac rehab are less likely to be readmitted to the hospital. Patient satisfaction for Lankenau’s cardiac rehab averages 95% and a recent survey showed that 100% of rehab patients reported an overall improvement in their quality of life. The department has become a major post-operation/intervention referral site for many of the downtown Philadelphia hospitals. “We have patients come to us from all over the region,” notes Dianne. Former cardiac rehab patients frequently stop back months later just to say hi to the rehab team. “They develop a strong bond with us during their time here and are always excited to give us an update on how they feel.”

Until recently, cardiac rehabilitation services were covered for several standard diagnoses including heart attack and implantation of stents, but not widely accepted as a therapy for heart failure, forcing some patients to pay out of pocket or secure private insurance for coverage. But after a recent study was published in the *Journal of the American Medical Association*, reporting that aerobic exercise is safe and effective for heart-failure patients, the Centers for Medicare and Medicaid Services expanded their coverage of cardiac rehabilitation services for patients suffering from “stable, chronic heart failure.” The 24-month study examined the effects of cardiac rehabilitation on nearly 2,300 patients and found that the people who exercised regularly did significantly better – having lower mortality and fewer hospitalizations – than those who did not. Cardiologists and therapists who treat heart failure applaud the decision. “Heart failure can be very frustrating,” says Dr. Siegfried. “You go into the hospital, receive treatment to reduce the fluid surrounding your lungs, then return home. Six to eight weeks later you drift back to where you were, with fluid in the lungs and shortness of breath, and you’re back in the hospital. Cardiac rehab offers a chance to directly impact the problem and break that cycle,” Dr. Siegfried insists. “It’s a gift.”

Lankenau’s Outpatient Cardiac Rehabilitation Program is certified by the AACVPR (American Association of Cardiovascular and Pulmonary Rehabilitation).

This article includes excerpts from the Philadelphia Inquirer.



In stark contrast, over the past five years more than 50 percent of all CABG procedures at Lankenau have been performed robotically using a single, 1³/₄-inch incision.

in a series of discrete steps, each with a particular objective to be achieved.

When I reluctantly leave the OR to get back to my day's work, I'm left with a staunch understanding that, when it comes to robot-assisted cardiac surgery, experience matters. Just as hours of time spent at the controls of a video game results in a proficient gamer, a surgeon's experience with such a precise and intricate robot, capable of replicating the smallest press of a finger or flick of a wrist, is crucial to the success of the procedure. And no one has more experience than Dr. Sutter.

In November 2013, Dr. Sutter reached a milestone – performing his 1,000th robotic assisted heart bypass procedure using the da Vinci® Surgical System – more than any other surgeon in the country. When this issue went to press, Dr. Sutter had surpassed 1,100 procedures. According to a March 2014 report of the Society of Thoracic Surgeons' national database, the majority of bypass operations are performed traditionally – by cutting the patient's chest open (98.8 percent) and using the heart-lung machine (84.7 percent) – causing increased pain and multiple postoperative complications, as well as a much longer recovery period. In stark

contrast, over the past five years more than 50 percent of all CABG procedures at Lankenau have been performed robotically using a single, 1³/₄-inch incision.

When he started using the robot almost a decade ago, Dr. Sutter said it wasn't just because it was new technology. "It's not about the technology but how it can improve quality of life," he insists. Dr. Sutter realized traditional coronary artery bypass surgery often failed to help people who needed it most: the very sick. "You could do perfect surgery, but it can still be so much trauma to the patient's body, that they don't recover well," he explains. "The robot enables me to avoid breaking the breast bone and, instead, perform surgery through a 1³/₄-inch incision. When my patients undergo this type of surgery, they are out of the operating room and back to their normal daily routines frequently in two weeks – that's only one-third of the time it takes for traditional coronary artery bypass surgery." For some that means going back to work, for others it means getting back into the gym faster. And although Dr. Sutter is proud of his milestone 1,000th patient, he's just as proud of that first patient. "He's still with us and going strong."

Learning to Listen *(continued from page 49)*



perspective of the patient; hone their personalized diagnostic skills; and help forge a bond of trust between physician and patient.”

Herman was purchased with a gift of more than \$100,000 from the Robinson Segal Family Fund at the request of Elissa “Lisa” Robinson Segal. Named by the manufacturing company as “Harvey,” Lankenau’s mannequin was re-named Herman in honor of Lisa’s late father Herman Robinson who,

along with Lisa’s late mother Jeanne, was a Lankenau benefactor.

The Robinson Segal Family Fund’s previous charitable giving has enabled the establishment of two other crucial programs at Lankenau: The Jeanne R. and Herman L. Robinson Endowment supports the Jeanne R. and Herman L. Robinson Medical Grand Rounds, a bi-weekly Continuing Medical Education program attended by attending physicians, fellows, residents, students and others. In addition, the Think Pink, Live Green initiative has touched thousands of lives through the educational and breast cancer risk-reduction programs and materials generated by this potentially live-saving endeavor.

100 Lives Changed Forever *(continued from page 51)*



screening process for TAVR under the guidance of Heart Valve Coordinator Lisa Igidbashian, MSN, CRNP. She then met with Dr. Scott Goldman for an initial surgical consultation and Dr. Roberto Rodriguez for a second opinion, required for

the TAVR procedure. Several tests including an echocardiogram and cardiac catheterization were performed and reviewed by Drs. Sandra Abramson and Jeffrey Wuhl, and Paul Coady and Eric Gnall, respectively. Mrs. Young’s history, consultations and diagnostic studies were then reviewed by the entire team who concluded that TAVR was the best treatment option for her.

Glee’s procedure was a tremendous success. Her new valve began working immediately and had an instant positive impact on her health. Coincidentally, Glee’s procedure overlapped with her husband Bill’s hospital recovery from aortic valve surgery, which he underwent one week earlier at Lankenau. The two reminisce about how, for a short time, they were able to share their meals together as inpatients with rooms just down the hall from one another. “I was an inpatient for a much shorter time than Bill, and my recovery was much quicker,” Glee remembers. “And I saw an immediate improvement in Glee,” says Bill. “And since the procedure, I have not needed the oxygen!” she exclaims.

Currently, Lankenau Medical Center is among the leading FDA-approved commercial SAPIEN valve sites in the region, averaging 8-10 cases monthly. In fact, due to the program’s success, the TAVR team has become a valuable resource mentoring local physicians and institutions, and Lankenau has grown to be a major referral site for complex cardiac cases. “It is so rewarding to see how well Glee - our very first TAVR patient - is doing,” says Ms. Igidbashian, “...and then to also see how, just 18 months later, our 100th patient is now beginning to experience those same benefits of renewed quality of life. The lives of these 100 individuals are forever changed.” At the time this issue went to press, more than 120 cases had been completed.

The TAVR program at Lankenau Medical Center complements the larger Heart Valve program of the Lankenau Heart Institute, which is home to one of the top surgical teams in the country for minimally-invasive mitral valve repair and aortic valve replacement. It’s our commitment to offering innovative treatment options such as TAVR that makes Lankenau a heart care destination for our patients. We deliver access to experienced physicians performing the newest procedures, which are enabled through pioneering research, state-of-the-art technology and facilities such as the Heart Pavilion.

For more information about TAVR or other treatment options for heart valve disease, visit mainlinehealth.org/tavr or call toll-free 1.855.820.Valve (1.855.820.8258).

Introducing the 1860 Society



Charter Members of the 1860 Society

Anonymous (2)
Robert L. Benz, MD
James F. Burke, MD &
Mary Denshaw Burke, MD
Joseph S. Bushra, MD
Ned Z. Carp, MD
Albert S. DeNittis, MD
James L. Doherty, MD
Charles J. Dunton, MD
Jeffrey B. Ellis, MD
Francis D. Ferdinand, MD
Evan D. Frank, MD, PhD
Anthony J. Fugaro, DO
Scott M. Goldman, MD
Peter R. Kowey, MD
William J. Lewis, MD
Lawrence L. Livornese, Jr., MD
Barry D. Mann, MD, FACS
Gerald J. Marks, MD
John H. Marks, MD
George L. Martin, MD
Frank C. McGeehin, III, MD
Thomas J. Meyer, MD
David Naide, MD
Clifford H. Pemberton, MD
George C. Prendergast, PhD
Jerome Santoro, MD
John G. Sauter, MD
Richard G. Schmidt, MD
William K. Sherwin, MD, PhD
Robert D. Smink, Jr., MD
B. Davison Smith, Jr., MD
Francis P. Sutter, DO
James J. Thornton, III, MD
Alexander Uribe, MD
Gordon W. Webster, MD
Carroll A. Weinberg, MD
Alan R. Wofsey, MD

The German Hospital of the City of Philadelphia, first located on the old Norris Homestead at 20th and Norris Streets was incorporated on April 2, 1860 through tireless efforts of physicians who were determined to meet the healthcare needs of their community. Ever since that day, it has in large measure been the hard work and unceasing commitment of our physicians that have allowed us to evolve from a 50-bed facility on a three-acre site to the world-class, nationally acclaimed center of patient care, education and research that Lankenau Medical Center is today.

Philanthropy was essential to Lankenau's founding, and has been a transformational force in our evolution as a world-class academic medical center. Historically, Lankenau physicians have been known to demonstrate their personal appreciation of Lankenau by their desire to invest in Lankenau's clinical excellence, cutting-edge research and superb medical education.

The *1860 Society*, established at Lankenau in 2013, was created to recognize and honor the philanthropic leadership of our physicians and scientists, who demonstrate their confidence in and commitment to the ideals that make this such an extraordinary institution. "I have been very fortunate to be able to practice at Lankenau and be part of an excellent medical staff and institution," says 1860 member, Dr. Jerome Santoro. "Joining 1860 is about recognizing your colleagues and the hospital family and

in a small way hopefully perpetuating graduate medical education, research, and first rate patient care for generations to come."

The vision of a Lankenau physician, the *1860 Society* consists of current and emeritus physicians and scientists who have pledged \$25,000 or more to support Lankenau Medical Center programs and services. In just a matter of months, the *1860 Society* grew from an initial core group of nine to 39 members whose commitments now total more than \$1.1 million. To honor the 38 Charter Members of the Society, who were eager and willing to lead by example, a permanent plaque listing their names will be displayed at Lankenau Medical Center for years to come.

So far, the *1860 Society* commitments have supported areas including fellowships, surgical education, cardiovascular services, breast care, cancer research and the Master Facility Project just to name a few. In addition to the incredible and direct impact that these resources have, this physician-led philanthropy is also a tremendous show of support and vote of confidence in our present and future, and a demonstration of the impact of the culture of philanthropy at Lankenau.

"These gifts are a real testament to the leadership and commitment of our physicians at Lankenau," says Lankenau President Phil Robinson. "It is such a meaningful response from the medical staff who have shepherded the care and culture at Lankenau for so many years, for which I am deeply grateful."

Charitable giving does not require great wealth.

What it does require is generosity of spirit – the desire to share what you have for the benefit of others. Whether your interests lie in helping Lankenau Medical Center provide crucial medical services, underwriting a specific program, or supporting medical education or research, your gift makes a real and enduring impact.

Making a Charitable Gift through your Will or Retirement Account

In this issue, we highlight how to include Lankenau Medical Center in your future plans, which is typically accomplished by a gift from your will (often called a “bequest”) or naming Lankenau as a beneficiary of a retirement account.

Gift from your will. After taking care of your loved ones, you can support the future of Lankenau and the health care needs of generations to come by adding a provision in your will or living trust. It’s simple to arrange, will not alter your current lifestyle in any way, and can easily be modified to address your changing needs.

How does this work? The easiest way to leave a gift to Lankenau is to add an amendment to your existing will (called a codicil) that includes a sentence clarifying your intentions. The following language is an example of how a bequest to Lankenau may be worded:

I give and devise to Lankenau Medical Center Foundation (Tax ID #23-2176723), located in Wynnewood, PA, ___ percent of my residual estate, both real and personal, (or a specific bequest of \$_____) to be used for its general support (or for the support of a specific fund or program).

This action could take place as part of regular “maintenance” of financial and estate matters that advisors recommend we perform at least every couple of years. Don’t have a will or living trust? Visit planned.giving.lankenau for tips on creating this important planning document.

Naming Lankenau as a beneficiary of a retirement account. Another straightforward way to make a noteworthy gift that costs you nothing now and can achieve significant tax savings is to name Lankenau as a primary or contingent beneficiary of a retirement or IRA account, brokerage account, or life insurance policy.

How does this work? This can usually be done quite simply by completing a Change in Beneficiary Form or by using online tools that many financial services firms offer in which you designate Lankenau as a percentage beneficiary.

A gift from your will or designation of Lankenau as a beneficiary of a retirement account are two ways that might allow you to make a more significant gift than you may have thought possible.

Utilizing either of these gift planning techniques – and letting us know about it – will qualify you for membership in Lankenau Legacies, our leadership society honoring individuals who have included Lankenau in their long-term financial or estate plans. Our goal is to create a growing community of donors who are making the future of Lankenau a priority.

For more information, please contact

David Phillips at 484.476.8070 or phillipsda@mlhs.org.



“My wife Eileen and I believe that we have come so far in medicine, but much more progress needs to be

made. Putting Lankenau in our will was a useful way for us to make a gift which will support important work in health-care. If you don’t have the means to make a large gift during your lifetime but you are still inspired to give, then giving through your will is a smart and easy way to make an impact.

Having worked at Lankenau Medical Center for over 30 years, I know the benefit of supporting medical progress and institutions that care for the community.”

~ Emeritus Lankenau Physician

Leroy T. Gerson, MD

Leaders



Lankenau Medical Center
Main Line Health