
Your Outpatient Care

**The Art of
Hospitality**

PAGE 30

Your Family

**New York
State's Best
Cardiac Care
for Kids**

PAGE 24

Your Body

**The New
Weight-Loss
Surgery That
Keeps the
Pounds Off**

PAGE 10

HOW THE ELITE STROKE CARE
AT NYU LANGONE HOSPITAL—
BROOKLYN HELPS PATIENTS LIKE
JOEL PRETZ SURVIVE—AND THRIVE.
PAGE 4

Brooklyn Strong



Milestones

Rusk Rehabilitation Is Still at Its Best after 75 Years. Here's Why.

If Howard A. Rusk, MD, who founded NYU Langone's Rusk Rehabilitation 75 years ago as the world's first comprehensive medical training program in rehabilitation medicine, could see 18-month-old Ryan Ahn Joelson in action, he would find proof of his belief that people with disabilities produce their own miracles. If he could witness the multidisciplinary team that tends to Ryan's progress, he would be heartened that his philosophy of "caring for the whole person" endures.

Ryan was born at Tisch Hospital, eight weeks premature and with no detectable heart rate, on January 17, 2022. The 4.4-pound infant was resuscitated, then transferred to the neonatal intensive care unit (NICU), tethered to breathing and feeding tubes. Ryan was diagnosed with congenital myotonic dystrophy, a rare neuromuscular disease that causes severe weakness and breathing difficulties.

Therapists began treating Ryan in the NICU to help him thrive as early as possible. At the age of ten months, he was stable enough to begin a comprehensive outpatient rehabilitation program. In coordination with Patricia Tan, MD, medical director of Rusk's pediatric physical medicine and rehabilitation service, and neurologist Mary-Lynn Chu, MD, director of the Elly Hammerman Center for the Treatment of Neuromuscular Disorders at NYU Langone Orthopedic Hospital (LOH), a team of physical,

occupational, speech, and swallowing therapists developed a care plan to maximize Ryan's capabilities. At LOH, he receives various therapies, including pool exercises, three days a week. His mother, Jennifer Ahn, often attends the sessions so that she and her husband, Andrew, both physicians, can ensure continuity of care at home to accelerate Ryan's developmental progress.

"Play is the most meaningful occupation of childhood because that's how children learn and discover," explains occupational therapist Kristen Olwell. "Ryan is incredibly motivated by play, which we use to improve his strength and motor skills," adds physical therapist Jessica Hubert. Ryan can now sit up independently, which allows him to visualize and interact with his environment, both critical to his development.

"Ryan's therapists are wonderful," says his mother. "They believe in him to reach his fullest potential. I can't imagine where we'd be without them."

Dr. Tan believes that Rusk's deep commitment to patients and their families explains why it's consistently ranked the #1 rehabilitation program in New York State and one of the top 5 in the country by *U.S. News & World Report*. "This is the beauty of Rusk—treating mind, body, and spirit," she says. "In less than a year, Ryan's progress has been amazing. At this rate, he's going to surprise all of us."



"This is the beauty of Rusk—treating mind, body, and spirit. Ryan's progress has been amazing. At this rate, he's going to surprise all of us."

—Patricia Tan, MD, medical director of Rusk's pediatric physical medicine and rehabilitation service



TO LEARN MORE ABOUT RUSK REHABILITATION, VISIT [NYULANGONE.ORG/RUSK](https://nyulangone.org/rusk) OR CALL 646-929-7800.



Physical therapist Cassandra Ruff uses water therapy to strengthen Ryan Ahn Joelson's respiratory muscles, with the goal of reducing his need for ventilator support.

THIS PAGE: COURTESY OF JENNIFER AHN

[When Seconds Count](#)

**Brooklynite
Joel Pretz Had
a Major Stroke.
Thanks to His
Elite Stroke
Team, You'd
Never Know It.**

Stroke survivor Joel Pretz and his trusted companion, Connor, enjoy daily walks along the Bay Ridge Promenade near their home in Brooklyn.



On July 28, 2022, Joel Pretz, a 52-year-old construction manager from Bay Ridge, Brooklyn, arrived home from a long, hot day at work feeling especially exhausted. He curled up on the floor with his 120-pound mastiff dog, Connor, and took a nap.

When Joel awoke, he sensed something was wrong. An avid bodybuilder, he found himself struggling just to stand up. His left arm was lifeless, as if he had fallen asleep on it. He did a push-up with his right arm and maneuvered to a nearby couch. Exhaustion hit him again.

“What is wrong with me?” he thought, before falling asleep again.

Lisa Pretz had been trying without success to reach her husband by phone. When she arrived home and saw Joel, the air left her lungs. “The left side of his face looked like a melted candle,” she says. “I knew he was having a stroke.”

Joel was rushed by ambulance to the Emergency Department at NYU Langone Hospital—Brooklyn in Sunset Park, where he was admitted at 8:13 p.m. Neurologist Brandon Giglio, MD, director of vascular neurology, and his team were waiting for Joel—standard protocol for the nearly 600 patients who arrive at NYU Langone Hospital—Brooklyn for stroke care annually. The hospital is one of only two in the borough certified by The Joint Commission, which accredits hospitals, as a Comprehensive Stroke Center for its capacity to provide the most advanced level of stroke care.

Joel had landed in the right place. Moreover, it had been less than six hours since the onset of his symptoms, which put him safely within the

“The national benchmark for getting stroke patients from the door to the start of thrombectomy is under 90 minutes. With Joel, we got him there in half the time and saved him from severe disability.”

**BRANDON GIGLIO, MD, DIRECTOR OF VASCULAR NEUROLOGY,
NYU LANGONE HOSPITAL—BROOKLYN**

window for effective interventions. But his symptoms were severe. A CT scan showed blockages in the main arteries that supply blood to the right side of the brain. He had partial vision loss, slurred speech, and complete paralysis of his left arm and leg.

Joel also had a complicated medical history. He was born with a congenital valve defect. In fact, he had undergone two open-heart surgical procedures at NYU Langone Health under the care of renowned cardiothoracic surgeon Mathew Williams, MD, chief of adult cardiac surgery and director of the Heart Valve Center. Due to Joel’s medical history, he was ineligible for drugs routinely used in the Emergency Department to dissolve clots. So additional expertise would be required to remove the blockages.

The team called in interventional neuroradiologist Jeffrey Farkas, MD. He and Dr. Giglio agreed that Joel’s best treatment option was a thrombectomy, a minimally invasive procedure to remove brain clots in circumstances like Joel’s where medication isn’t an option. With nearly 30 years of experience, Dr. Farkas is one of the pioneers in the use of minimally invasive procedures to treat stroke. The average Comprehensive Stroke Center performs 63 thrombectomies annually. At NYU Langone Hospital—Brooklyn, the team performed 95 in 2022.

“When it comes to stroke, restoring blood flow to the brain is the number one treatment,” says Dr. Farkas. “Joel’s blockages were at the top of his carotid artery. We had to get it open. It would be a pretty devastating injury if we couldn’t.”

By 9:00 p.m., 47 minutes after his arrival, Joel was in the interventional neuroradiology suite. Through a small incision in Joel’s groin, Dr.

Farkas placed a long, flexible tube and advanced it to his carotid artery, which is the largest vessel supplying blood to the brain. Using real-time X-ray imaging for guidance, Dr. Farkas navigated a pair of devices to grab and extract two of the clots, which were in the carotid artery and just past it, in the middle cerebral artery. For the third clot, in the anterior cerebral artery, which also leads from the carotid, he delivered a form of clot-busting medicine that Pretz could safely receive. By 9:21 p.m., Joel’s clots were gone, and he was transferred to the neurointensive care unit for recovery.

“National benchmarks state that we’re supposed to get stroke patients from the door to the start of thrombectomy within 90 minutes. With Joel, we got him there in half the time,” says Dr. Giglio. “Getting him there that fast is what saved his life and saved him from severe disability.”

When Lisa was able to see Joel, an hour after the procedure, he had regained full control of his arm and leg. “I almost fell on the floor, I was so shocked,” recalls Lisa. “When we got to the hospital, he had absolutely no movement in his left arm and leg, but after the procedure, he did.”

The road from stroke to recovery is often long and arduous. Joel entered cardiac and stroke rehabilitation at Rusk Rehabilitation in Manhattan to be closer to his cardiac team. For six months, Joel worked diligently to regain his strength. Today, he’s healthy enough to take daily two-hour walks with his dog, and he has no neurological deficits. “The day of my stroke was an unforgettable day,” Joel says. “But I am so grateful—to my doctors, nurses, and therapists who helped me get my strength back, and of course, my wife.”





JONATHAN KOZOWYK

THE BEST IN THE BOROUGH

NYU Langone Hospital—Brooklyn is one of only two Comprehensive Stroke Centers in Brooklyn.

Number of Stroke Patients in 2022:

582

Number of Thrombectomies in 2022:

95

(OTHER COMPREHENSIVE STROKE CENTERS PERFORM 63 ON AVERAGE)

Door-to-Needle Time:

29 Minutes

(NEW YORK CITY AVERAGE IS 42 MINUTES)

Door-to-Puncture Time for Thrombectomy:

55 Minutes

(NEW YORK CITY AVERAGE IS 82 MINUTES)

+ TO LEARN MORE ABOUT STROKE, VISIT [NYULANGONE.ORG/STROKE-CENTER](https://nyulangone.org/stroke-center) OR CALL 646-929-7800.

Health Equity

Hearing Loss in the Immigrant Community: We're Listening.

For two decades, J. Thomas Roland, MD, professor of otolaryngology–head and neck surgery at NYU Grossman School of Medicine, has brought his expertise to distant nations. In the East African Republic of Uganda, where he launched a screening program in three major cities, he found that the incidence of hearing loss among children was as high as 13%. “I began thinking about what we could do in Brooklyn, where there are huge immigrant populations with kids who were never screened in their native countries and aren’t screened here until they start to fail in elementary school,” says Dr. Roland. “I thought, ‘Why don’t we start screening one- to five-year-olds in Sunset Park, the neighborhood where NYU Langone Hospital—Brooklyn is located.’”


Nearly half of Sunset Park’s residents were born outside the US, and the neighborhood is home to nearly 35,000 youngsters. Worldwide, hearing loss is the fourth-largest disability. In this country, 5 out of every 1,000 children are affected, impacting their ability to learn a language, perform in school, socialize with peers, and in the long run, compete professionally. Even mild hearing loss can cause a child to miss as much as 50% of the information conveyed in a classroom.

Dr. Roland brought his idea to Gbenga Ogedegbe, MD, MPH, the Dr. Adolph and Margaret Berger Professor of Medicine and Population Health and director of the Institute for Excellence in Health Equity, whose team had developed a successful model for engaging local residents by educating the leaders of community- and faith-based organizations about healthcare priorities. In November 2022, the Hearing Loss Awareness and Screening Program for Low-Income Immigrant Families debuted, funded by a \$1 million donation from Larry Silverstein, a trustee of NYU and NYU Langone Health.

Volunteers from community organizations are trained to perform screenings with a handheld device. A soft-tipped probe is inserted into the outer segment of each ear to check whether the hair cells in the inner ear, which relay sound to the brain, respond normally to auditory stimuli. The screenings are fast, painless, and free, including a car service to and from appointments, notes program director Moses Mansu, DrPH. “If you fail twice, you’re referred to a clinician for a formal exam and audiogram,” explains NYU Langone pediatric otolaryngologist Marie Homsy, MD.

Of the 148 screenings performed in Sunset Park so far, hearing loss was detected in 13% of children age six and younger and 5% of those age seven and older. In June 2023, the screening program was expanded to Mineola, where NYU Langone Hospital—Long Island is located.

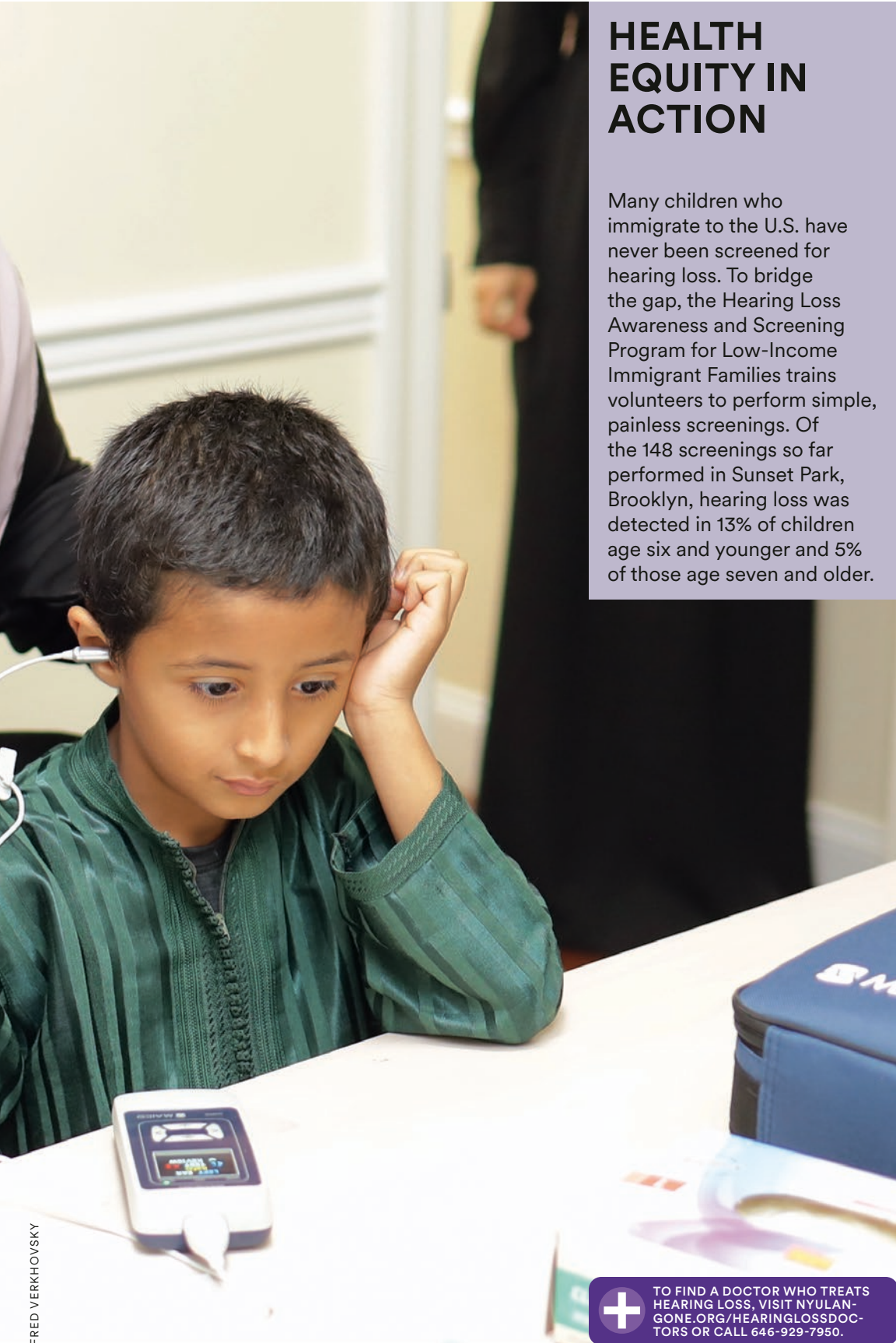
Dr. Roland plans to collect data that may help uncover the incidence and causes of hearing loss in immigrant children. “What we’re doing is quite unique,” he says. “This project has been so successful that other communities are now asking if we could screen their children as well. Some parents ask, ‘Would you mind screening me, too?’ and we’re happy to oblige. For now, we’re focusing on children, but our next project might be for people over age 65. Adult hearing loss is a big issue because it leads to depression, social withdrawal, and even dementia.”



Islam Hamdan, a volunteer at Brooklyn’s Bay Ridge Community Development Center, screens a young boy during the organization’s first free hearing loss screening, held last fall, marking the launch of the Hearing Loss Awareness and Screening Program for Low-Income Immigrant Families.

“What we’re doing is quite unique. This project has been so successful that other communities are now asking if we could screen their children as well.”

—J. Thomas Roland, MD, professor of otolaryngology–head and neck surgery at NYU Grossman School of Medicine



HEALTH EQUITY IN ACTION

Many children who immigrate to the U.S. have never been screened for hearing loss. To bridge the gap, the Hearing Loss Awareness and Screening Program for Low-Income Immigrant Families trains volunteers to perform simple, painless screenings. Of the 148 screenings so far performed in Sunset Park, Brooklyn, hearing loss was detected in 13% of children age six and younger and 5% of those age seven and older.

In Suffolk County, NYU Langone's Top-Ranked Neurology Program Expands Its Care

For the second year in a row, NYU Langone Health's neurology program has been ranked #1 in the nation by *U.S. News & World Report*. In Suffolk County on Long Island, a good thing just got better, now that South Shore Neurologic Associates, the premier provider for neurologic care on Long Island, has joined NYU Langone's ambulatory care network. NYU Langone South Shore Neurologic Associates brings some 20,000 patients and 200 employees into NYU Langone Health, making it one of the network's largest practice transitions to date.

Locations in Patchogue, Riverhead, and Islip offer a wide range of neurologic care, including diagnostic testing; physical therapy; pain management; acupuncture; chiropractic; comprehensive services for multiple sclerosis, headache and migraine, and epilepsy; as well as clinical trials. "With a shared commitment to high-quality specialized care, together we can better meet the needs of our diverse patient population in Suffolk County," says Andrew Rubin, senior vice president for clinical affairs and ambulatory care.



FRED VERKHOVSKY

 TO FIND A DOCTOR WHO TREATS HEARING LOSS, VISIT NYULANGONE.ORG/HEARINGLOSSDOCTORS OR CALL 646-929-7950.

Building Better in Brooklyn

The New Weight-Loss Surgery That Helps Keep the Pounds Off. For Good.

In the spring of 2023, a 28-year-old woman consulted Fareed Cheema, MD, a weight-loss surgeon at NYU Langone Hospital—Brooklyn, feeling deeply discouraged. In the six years since her first bariatric procedure in 2017, she had regained 66 pounds, nearly all the weight she had lost. Still severely obese at 4'11" and 279 pounds, she was desperate to find a better way to drop at least 100 pounds, once and for all.

She had come to the right place, and just the right surgeon. Three years after NYU Langone Hospital—Brooklyn launched its bariatric surgery program in 2001, it became one of the first in the US to be accredited as a national center of excellence by the American Society for Bariatric Surgery. The hospital's four bariatric surgeons (*see box*) perform nearly 400 weight-loss operations annually, and more of these cases are done robotically than at any other hospital in Brooklyn.

Dr. Cheema joined the surgical team last year as a clinical assistant professor of surgery at NYU Grossman School of Medicine, and he has already made his mark. On May 30, he became the first bariatric surgeon at NYU Langone Hospital—Brooklyn to perform a newer type of bariatric surgery, debuted in 2007, that's ideal for patients who have both diabetes and obesity, as well as

for those whose previous bariatric intervention has failed. Called the Single Anastomosis Duodenal-Ileal Bypass with Sleeve Gastrectomy, or SADI-S, it's the latest procedure endorsed by the American Society for Metabolic and Bariatric Surgery. Dr. Cheema has since performed 22 SADI-S procedures, more than any other bariatric surgeon in Brooklyn. NYU Langone Health's bariatric programs at Tisch Hospital and NYU Langone Hospital—Long Island also offer the procedure.

"The SADI-S has been proven to have a higher initial weight loss and higher long-term weight loss, as well as lower weight regain overall, than two other commonly performed procedures, the sleeve gastrectomy and gastric bypass," notes Akuezunkpa Ude Welcome, MD, a bariatric surgeon and chief of surgery at NYU Langone Hospital—Brooklyn.

Some patients who undergo bariatric surgery eventually regain much of the weight they lose because they find it hard to comply with dietary restrictions, leading nearly one-third of them to opt for a second procedure. What makes the SADI-S a game-changer is that it achieves better results by fundamentally altering the digestion process. (*See box.*)

Patients are eligible for the SADI-S if they are morbidly obese—

defined as a body mass index (BMI) of 40 or higher—or are severely obese (BMI of 35–40) with diabetes, a disease for which the procedure has a 90% cure rate. Because the SADI-S is highly effective for long-term weight loss, the procedure is also well suited to patients whose previous bariatric surgery hasn't produced the desired results, like the young woman who consulted Dr. Cheema. On June 13, she became his third SADI-S case. One month after surgery, she lost 33 pounds—12% of her total weight. "My expectation," says Dr. Cheema, "is that by the one-year mark, she will lose 35% to 40% of her initial weight, almost 100 pounds, and that she'll keep it off because she's no longer relying solely on a restricted diet."

The prevalence of obesity—defined as a BMI of 30 or higher—has tripled over the last five decades. An estimated 42% of American adults qualify as obese, and 9% are classified as severely obese. In Brooklyn, the obesity rate is 25%, while in Sunset Park, the neighborhood surrounding NYU Langone Hospital—Brooklyn, it's 19%.

"Obesity touches on every single organ system," says Dr. Welcome, noting that it's associated with higher rates of stroke, heart disease, type 2 diabetes, infertility, osteoarthritis, and certain cancers. Yet only

1% of those eligible for weight-loss surgery get it.

"Some patients say to me, 'I don't want to have surgery because I'd rather try one of those new diabetes medications that make you lose weight,'" says Dr. Cheema. These medications are semaglutide injections, the newest class of anti-obesity drugs currently approved by the FDA to treat diabetes but widely prescribed for weight loss. Dr. Cheema explains to patients that while these medications can give severely obese patients a head start before surgery, they achieve a maximum weight loss of only 15% to 20% compared to the 30% to 40% that surgery affords. Moreover, studies show that 80% of those who stop taking their medication regain nearly all the weight they lost. "These medications are a useful adjunct, though they're currently unaffordable for most people over the long term," notes Dr. Cheema. "But they are never going to be a substitute for bariatric surgery, which remains the gold standard. The two markers of a great weight-loss operation are high success rates for reversing diabetes and keeping weight off. The SADI-S has both."

 TO FIND A WEIGHT LOSS SURGEON, VISIT [NYULANGONE.ORG/BARIATRICSURGEONS](https://www.nyulangone.org/bariatricsurgeons) OR CALL 646-929-7800.

MEET THE WEIGHT-LOSS SURGEONS AT NYU LANGONE HOSPITAL—BROOKLYN



Akuezunkpa Ude Welcome, MD
Assistant professor of surgery;
chief of surgery



George Ferzli, MD
Clinical professor of surgery;
medical director, Accredited
Center of Metabolic and Bariatric
Surgery and Quality Improvement
Program



Fareed Cheema, MD
Clinical assistant professor
of surgery

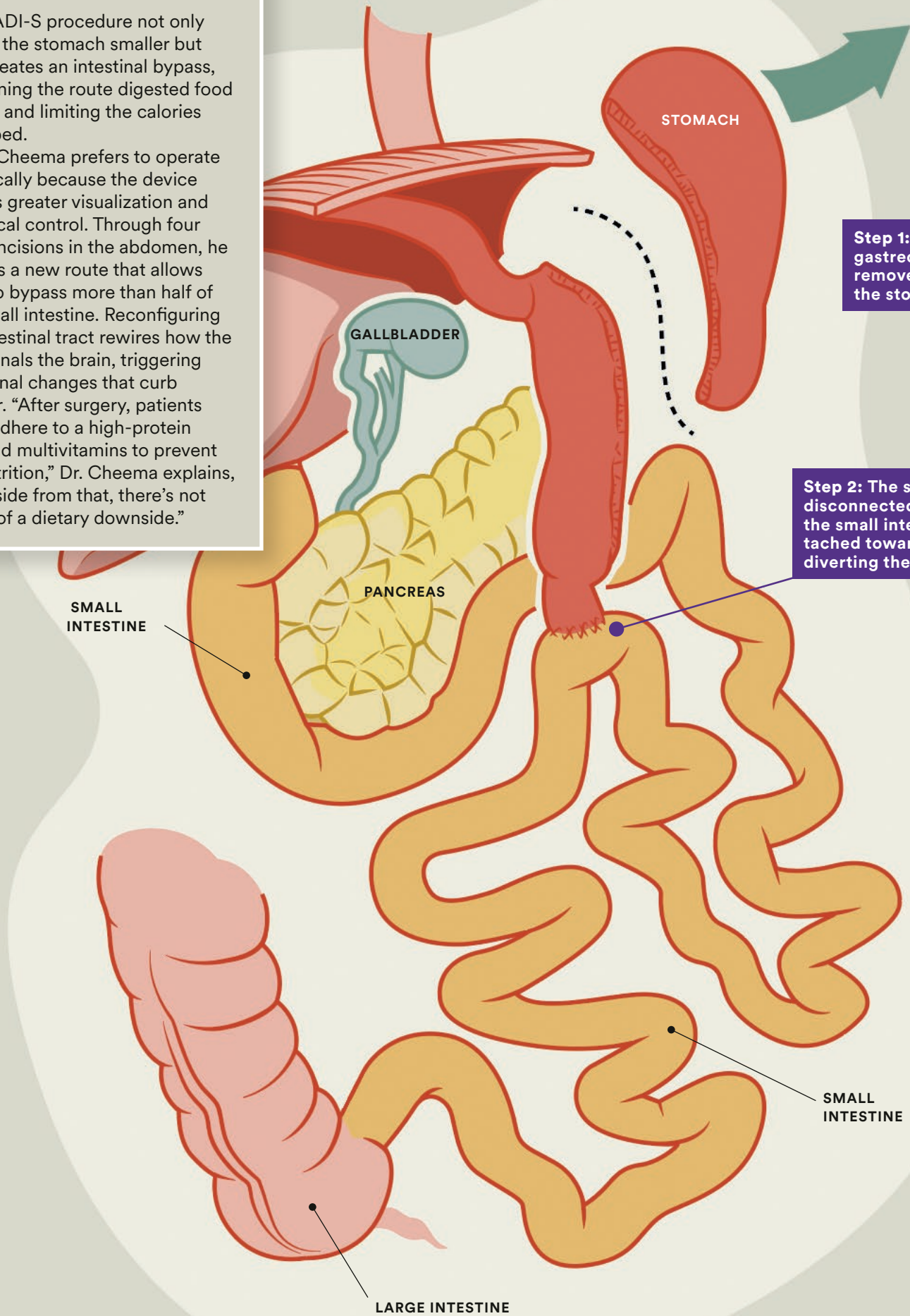


Alexandra Argiroff, MD
Clinical assistant professor
of surgery

How It Works

The SADI-S procedure not only makes the stomach smaller but also creates an intestinal bypass, shortening the route digested food travels and limiting the calories absorbed.

Dr. Cheema prefers to operate robotically because the device affords greater visualization and technical control. Through four small incisions in the abdomen, he creates a new route that allows food to bypass more than half of the small intestine. Reconfiguring the intestinal tract rewires how the gut signals the brain, triggering hormonal changes that curb hunger. "After surgery, patients must adhere to a high-protein diet and multivitamins to prevent malnutrition," Dr. Cheema explains, "but aside from that, there's not much of a dietary downside."



Step 1: A sleeve gastrectomy removes 80% of the stomach.

Step 2: The stomach is disconnected from top of the small intestine and reattached toward the bottom, diverting the flow of food.

Second Opinions

Nadine Dio Was Out of Options. Then She Came to Perlmutter Cancer Center.

One evening in December 2017, Nadine Dio was applying face cream when she felt a lump on the right side of her neck. “Being afraid, I didn’t do anything about it for a few months,” says the 52-year-old long-time wedding florist. In May 2018, a CT scan revealed that the lymph nodes in Dio’s neck were enlarged. A biopsy led to a diagnosis of adenocarcinoma, a cancer that forms in glandular tissue, which was believed to have spread to the neck from an unknown origin.

Dio lives in Greenlawn, a hamlet in Suffolk County on Long Island, but in July, she was referred to a medical center in Manhattan, where she was treated for head and neck cancer with six cycles of the chemotherapy drugs paclitaxel and carboplatin. By February 2019, blood markers indicated that her cancer was progressing. Dio’s oncologist told her that nothing else would work for her. “The news just broke my heart,” she says. “My father had to bury one of his two children, and I was determined that he wouldn’t have to do that again.”

For guidance, Dio reached out to her stepmother, who contacted Birjis Akhund, MD, a medical oncologist at Perlmutter Cancer Center at NYU Langone Huntington Medical Group. When Dr. Akhund learned of Dio’s request for a second opinion, he arranged to see her as soon as possible. “I met Dr. Akhund on February 11, my birthday,” recalls Dio, “and I couldn’t have asked for a better present than to meet a new doctor who wanted to look at my case. I thought, ‘Wow, this doctor really cares about me, and he hasn’t even met me. I have hope now.’”

Initially, Dr. Akhund felt that Perlmutter Cancer Center could at least offer Dio good supportive care, but after he met with her and pored

over her medical history, he became more optimistic about her prospects. “I look at a case really carefully,” says Dr. Akhund, clinical assistant professor of medicine at NYU Grossman School of Medicine. “I start at the very beginning. It’s like a puzzle. You put it all together, and sometimes, suddenly, a door opens.”

Dr. Akhund was struck by several things that made him question Dio’s original diagnosis. Head and neck cancer, he explains, is sometimes associated with the human papillomavirus (HPV), but Dio’s biopsy results were negative for HPV. Moreover, this type of cancer usually strikes people who are not only longtime smokers but also heavy drinkers, and while Dio had a history of smoking, she did not fit into the latter category. Also, a patient in their late 40s would be considered young for head and neck cancer, which is more commonly found in people in their 60s and 70s. Most telling of all, Dr. Akhund knew that head and neck cancer is invariably squamous cell carcinoma, a form of skin cancer, rather than adenocarcinoma. “While no primary tumor was identified, which is true in about 15% of all cases, the nodes in the lower neck were involved,” notes Dr. Akhund. “This suggested that locally advanced lung cancer had spread to the lymph nodes rather than the other way around.”

Dr. Akhund discussed Dio’s case with Perlmutter Cancer Center’s Tumor Board, a multidisciplinary team of experts who review challenging cases. “It was about rethinking the strategy and saying, Do we have something that can cure this?” says Dr. Akhund. “Nadine was young and otherwise healthy. So I thought, ‘We might be able to beat this.’ It’s never too late. You never take hope away.”

“Dr. Akhund and his team are amazing. It was that second opinion that saved my life.”

—Nadine Dio (right), Perlmutter Cancer Center patient



“I look at a case really carefully. I start at the very beginning. It’s like a puzzle. You put it all together, and sometimes, suddenly, a door opens.”

—Birjis Akhund, MD, medical oncologist at Perlmutter Cancer Center at NYU Langone Huntington Medical Group

Dr. Akhund explained to Dio that the plan was to start from scratch. Her disease would be reclassified as stage 3B non-small-cell lung cancer, and the treatment regimen would be aggressive. To destroy the cancer cells, Dio was administered high doses of two potent chemotherapy drugs, cisplatin and pemetrexed, along with radiation therapy to the lungs and lymph nodes in the neck. Then, she was given the immunotherapy drug durvalumab, a so-called

checkpoint inhibitor that blocks proteins that prevent the immune system from attacking cancer. “If we used only chemotherapy and radiation,” explains Dr. Akhund, “the likelihood of a recurrence would be 85% to 90%. This is what makes us a great cancer center: being able to look at a case through a different lens from multiple perspectives.”

Dio’s follow-up scans have shown no signs of cancer since October 2019, but she remained on immu-

notherapy for two years afterward to ensure a sustained period of remission. “I want to help people who have that same feeling of hopelessness I had when I was told that they could only buy me time,” she says. “Dr. Akhund and his team are amazing. It was that second opinion that saved my life.”



TO FIND A DOCTOR WHO TREATS LUNG CANCER, VISIT [NYULANGONE.ORG/LUNGCANCERDOCTORS](https://www.nyulangone.org/lungcancerdoctors) OR CALL 212-731-6000.

Nadine Dio relied on her father, Michael Muxie, for support throughout her treatments.





As a young researcher in a hematology lab at NYU Langone, Dr. Birjis Akhund (right, with patient Nadine Dio) was intrigued by a journal article describing how tumors were introduced into mice to activate their immune systems. "That was 30 years ago," he says. "Now, there's an effective immunotherapy medication I can administer to patients."



Tak Yuen (right) needed bypass surgery urgently, but his weakened heart made him a poor candidate for the procedure. His cardiologist, Dr. George Fernaine (left), collaborated with cardiothoracic surgeon Elias A. Zias, MD, to mitigate the risks and restore Yuen's health.

NYU Langone Heart

Heart Failure Can Disqualify Many Patients from Bypass Surgery. But Not Here.

When Tak Yuen, 62, arrived at the Emergency Department at NYU Langone Hospital—Brooklyn in November 2022, his son and wife had to help him walk. Just days before, he had reported for duty as a sergeant in the Triborough Bridge and Tunnel Authority, but ever since, he had grown weaker. Finally, at his wife's urging, he went to the hospital.

"People around me were talking, and I could hear them," recalls Yuen. "But it was like I wasn't really there mentally. I thought I was dying."

Yuen presented a challenging case for George Fernaine, MD, chief of cardiology at NYU Langone Hospital—Brooklyn. A CT scan showed a life-threatening blood clot in Yuen's lung—a pulmonary embolism. He also had diabetes, high blood pressure, high cholesterol, chronic kidney disease, and heart failure, likely due to blocked arteries.

"He was extremely ill and had two very serious problems: an acute pulmonary embolism and heart failure," says Dr. Fernaine. The challenge was to manage Yuen's heart failure while also dissolving the blood clot in his lung, all while avoiding the risk of heart attack.

Dr. Fernaine's step-by-step plan for Yuen unfolded over several months. Yuen continued on blood thinners and medications for heart failure until February 2023, when the clot finally dissolved. Then, he underwent an angiogram, a test that uses a special dye and X-ray imaging to visualize how well blood is moving through the coronary arteries. As Dr. Fernaine predicted, multiple arteries were completely blocked and would require coronary artery bypass surgery to open.

Yuen was referred to cardiothoracic surgeon Elias Zias, MD, director of NYU Langone's Coronary Artery Bypass Program, who specializes in complex cases like Yuen's. Supported by a cardiac surgery team with a three-star rating from the Society of Thoracic Surgeons for coronary artery bypass grafts—the highest rating possible—Dr. Zias delivered a jolt of hope to the family.

"At NYU Langone Hospital—

Brooklyn, we collaborate with our top-ranked cardiac surgeons, extending access to the most advanced options, while providing follow-up care close to home," says Dr. Fernaine. "This truly makes us unique."

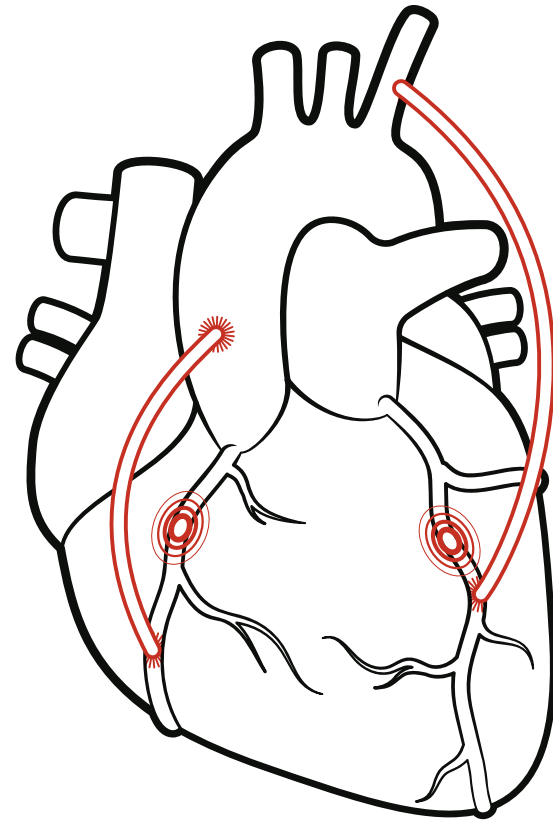
Yuen's bypass would reroute five arteries. With the pumping capacity of his heart severely compromised, the surgery was considered high risk. So risky, in fact, that many people with Yuen's condition are told they are not candidates for bypass. "Tak's risk with traditional bypass was higher than average," says Dr. Zias. But he had a unique plan to manage it.

Dr. Zias specializes in an innovative technique that combines bypass surgery with an implantable heart pump called a temporary transvalvular ventricular assist device. "The device takes over the job of pumping blood and allows the heart to rest as it recovers from the surgery," says Dr. Zias.

On February 28, Yuen underwent bypass surgery. A small pump was then threaded through a tube graft sewn into his aorta. Within a day after the surgery, Yuen was strong enough to walk—a crucial indicator of a successful recovery. "For every week you spend immobile, you'll need a month of rehabilitation," says Dr. Zias. "The heart pump allows a person to get up and move around sooner, and that makes a huge difference in their overall recovery."

After 10 days, the pump was removed during a bedside procedure that required no additional anesthesia or surgery. On March 10, Yuen returned to his home in Bay Ridge, Brooklyn. His recovery continues with cardiac rehabilitation at NYU Langone Hospital—Brooklyn, and he still sees Dr. Zias and Dr. Fernaine for checkups. But all indications suggest a bright future.

This summer, Yuen took his daughter to see Taylor Swift. "I admit it. I'm a Swiftie, too," he says. This fall, he hopes to return to work. "I can't wait because that means I'm well," says Yuen. "And being well is better than anything that money can buy."



"The heart pump allows a person to get up and move around sooner after bypass surgery, and that makes a huge difference in their overall recovery."

—Elias Zias, MD, director of NYU Langone's Coronary Artery Bypass Program

Hassenfeld Children's Hospital

5 SURPRISING FACTS ABOUT

Liver Disease in Children



Liver disease is often associated with adults, but it affects kids, too. Each year, more than 15,000 children are hospitalized for liver conditions, a category that spans a host of genetic, autoimmune, viral, and environmental causes.

While liver disease is easiest to treat when caught early, most forms of the disease have few if any symptoms in the earliest stages. When symptoms do surface, like yellowing of the skin or eyes, fatigue, nausea, itching, dark urine, or bruising, the disease is often advanced. Once a liver fails, even a young one, transplantation may be the only treatment option.

“Liver disease affects children of all ages, including infants,” says Nadia Ovchinsky, MD, director of the Division of Pediatric Gastroenterology and Hepatology at NYU Grossman School of Medicine. “We provide the most advanced treatments and diagnostic tools and bring together multiple specialists to meet every aspect of their care.”

While many forms of liver disease are on the rise among kids, youthfulness offers some unique advantages when it comes to healing. Here are five surprising facts about the body's largest solid organ and how to intervene when it begins to fail in childhood.

1

When kids get liver disease, it affects their growth and development.

The liver's big job is to filter waste from the blood. Its cleansing function protects developing brains from toxins. The liver also produces bile, which helps the body digest fat, extract nutrients and sugar from the blood, and regulate critical growth hormones.

“The liver is crucial to hormone regulation, growth, development, and mental awareness,” says Jennifer Vittorio, MD, medical director of the Pediatric Liver Disease and Transplant Program at Hassenfeld Children's Hospital at NYU Langone. “When the liver gets sick, you have a child who cannot grow.” Restoring a liver to good health, either through treatment or transplant, also restores a child's quality of life, she adds.

2

Nonalcoholic fatty liver disease often starts in childhood.

About 7 million teens live with nonalcoholic fatty liver disease, a condition in which fat accumulates in the liver.

When left unchecked, it can steadily advance into adulthood and eventually require a liver transplant. “That's why we want to intervene at an early age, when we can really make a difference through lifestyle changes, including diet and exercise, and especially decreasing the intake of sugar and fructose—all of which help prevent and reverse fatty liver disease,” says Debora Kogan-Liberman, MD, director of pediatric hepatology in the Division of Pediatric Gastroenterology and Hepatology.

3

The liver is the only organ that can regenerate.

Liver transplantation for children is often highly successful because kids only require a small portion of a liver, not the entire organ. This means that a living donor, such as a parent, could donate a portion of their liver. Those cells will regenerate to create new, healthy cells, allowing the transplanted organ to grow with the child. Similarly, the donor's liver will regenerate and grow back to the same size it was prior to donation.

“The liver is the only organ that can regenerate in both volume and function,” says Adam Griesemer, MD, surgical director of the Pediatric Liver Disease and Treatment Program, “and because of this, the lifespan of a transplant is longer than many other organs. There are people who received a liver transplant 40 years ago and still have a functioning organ, thanks also to better immunosuppression regimens.”

4

Biliary atresia is the leading cause of liver transplants in children.

Among the deadliest rare liver diseases is biliary atresia, a congenital condition where the ducts that transport bile to the intestine are blocked. When diagnosed within a few months after birth, the disease can be treated with a procedure to remove the damaged ducts and attach a section of the small intestine to the liver to allow bile to drain into the intestine. The earlier this procedure is performed, the better the outcome. If diagnosis is delayed, and liver damage progresses, a transplant becomes the only option for survival.

But it can be difficult to diagnose biliary atresia in its earliest stages. There's no routine screening test for it. “This is one reason why early pediatric visits are so important,” says Dr. Vittorio. “If jaundice persists after a few weeks of life, the baby can be tested for evidence of liver disease.”

5

New DNA tests makes it possible to catch many hidden liver disorders.

Historically, many inherited liver conditions have been difficult to diagnose, but new gene-sequencing technology is changing that. One targeted DNA test can now screen for more than 70 liver conditions. “When you have the right diagnosis, you can avoid the wrong therapies,” says Dr. Ovchinsky. “Genetic testing now looks for numerous mutations, and it can be done rapidly, which allows for early detection and potential treatment.”



TO FIND A DOCTOR WHO TREATS LIVER DISEASE IN CHILDREN, VISIT NYULANGONE.ORG/PEDIATRICLIVERDISEASEDOCTORS OR CALL 212-263-5940.

Technology

NYU Langone Unleashes the Potential of Generative AI



“We have in place one of the nation’s first privately managed, secure, and HIPAA-compliant GPT4 ecosystems in a healthcare organization.”

— Nader Mherabi, exec. vice president, vice dean, and chief digital and information officer at NYU Langone

On August 18, hundreds of NYU Langone employees came together for a first-of-its-kind event to test the mettle of the institution’s privately managed GPT4 tool. GPT4 is among a growing list of software products that rely on generative AI, the buzzy new technology that can ingest vast amounts of text from publicly available sources like the Internet to find patterns among words and then predict answers to just about any question a human could conceivably ask it.

During the event, called a Prompt-a-Thon, participants paired with NYU Langone experts ex-

plored how to write prompts, or instructions, for GPT4. The groups used de-identified patient data to assess the tool’s aptitude for solving real-world clinical problems. For example: Can GPT4 offer patient-friendly explanations of conditions? Can it accurately suggest improvements in care plans? Can it reliably flag potential safety issues? Other groups explored research challenges, like how the tool might improve grant writing or summarize research literature.

“We have in place one of the nation’s first privately managed, secure, and HIPAA-compliant GPT4 ecosys-

tems in a healthcare organization,” says Nader Mherabi, executive vice president, vice dean, and chief digital and information officer at NYU Langone Health. “This event is among our large-scale efforts to test potential healthcare uses of generative AI in a safe and responsible manner.”

For all its explosive potential, generative AI also comes with risks, especially in a healthcare setting. Unlike humans, it cannot think or draw conclusions without known reference material. The Prompt-a-Thon, jointly hosted by NYU Langone’s MCIT Department of Health Informatics, the Institute for Innova-

tion in Medical Education, and the Institute for Excellence in Health Equity, presented an opportunity to expose more NYU Langone employees to the vast potential of the tool while also safely exploring its limitations.

“Equally important is the ability of our workforce to identify these models’ limitations,” adds Jonathan Austrian, MD, associate chief medical information officer for inpatient informatics. “No matter how many new ways we discover to use GPT4, it will be limited to a supporting role, to augment work, with our employees in the driver’s seat.”

“I feel incredibly lucky to have participated in this trial. It’s given me the freedom to plan for the future.”

—Gary Keblish, now cancer free after nearly five years in a clinical trial to stave off the return of metastatic melanoma



Perlmutter Cancer Center

In the Sprint to Beat Metastatic Melanoma, a Personalized Cancer Vaccine Speeds Ahead

In his 57 years, Gary Keblish had never paid much attention to the large, dark mole on his lower right back. But one day in the spring of 2019, a colleague at the Brooklyn public high school where he teaches pointed out a red spot on Keblish's shirt. In a bathroom mirror, Keblish saw that the mole was seeping blood. He consulted dermatologist Peter Saitta, MD, at NYU Langone Health, who biopsied the lesion. To Keblish's dismay, the finding was melanoma, a deadly form of skin cancer diagnosed in more than 91,000 Americans annually.

Dr. Saitta referred Keblish to surgical oncologist Richard Shapiro, MD, who performed an exploratory operation to determine how far the disease had spread to surrounding tissue. Dr. Shapiro found and removed a small mass under Keblish's right arm. But Keblish was not out of the woods yet. When caught early, melanoma is highly treatable, but once it starts to migrate, as in Keblish's case, the danger rises. Among patients diagnosed when their cancer has spread to nearby lymph nodes, about 74% are still alive five years later. For people with metastatic disease, however, the survival rate drops to 35%.

To boost his odds, Keblish was referred to medical oncologist Jeffrey Weber, MD, PhD, interim director of Perlmutter Cancer Center at NYU Langone. Dr. Weber is at the forefront of a new generation of experimental treatments for melanoma aimed at preventing recurrence in patients who've had a tumor surgically removed. He offered Keblish a clinical trial testing a new type of cancer vaccine using the same mRNA technology that would later be adapted for COVID-19 vaccines.

Keblish hesitated. "I thought someone younger, who had more years to look forward to, might be a better candidate," recalls the former marine, whose service in the first Gulf War helped prepare him for challenges ahead. But at the urging of his wife and teenage daughter, he decided to go for it.

Although researchers have tested cancer vaccines for decades, none had proven useful clinically. The vaccine in Dr. Weber's trial, however, took a novel approach. Developed jointly by the pharmaceutical compa-

Cancer survivor Gary Keblish enjoys cycling in Brooklyn, the borough he calls home.

“We’re going to keep chipping away until almost nobody has a recurrence.”

— Jeffrey Weber, MD, PhD, medical oncologist and deputy director of Perlmutter Cancer Center at NYU Langone

nies Moderna and Merck, it trained the immune system to attack neoantigens—proteins unique to the patient’s cancer. After Keblish’s tissue samples were genetically sequenced, technicians created a vaccine that was customized for his cancer and would target those proteins.

Keblish was one of 107 trial participants who received both an older class of immunotherapy known as checkpoint inhibitors that prevent cancer cells from disarming the immune system—and the personalized vaccine. When Dr. Weber and his team announced their results in April 2023 at the annual meeting of the American Association for Cancer Research, the news made global headlines. For the first time in a randomized trial, mRNA technology was shown to impact outcomes for melanoma patients. Over three years, the dual therapy had reduced the likelihood of cancer recurrence by 44% compared with the group receiving the checkpoint inhibitor alone. Moreover, immune side effects were similar in both groups.

Now four years after receiving the treatment, Keblish remains in remission. “I feel incredibly lucky to have participated in this trial,” he says. “It’s given me the freedom to plan for the future.”

Dr. Weber, too, is looking ahead. A phase 3 trial is planned to start later this year. He’s also excited by growing evidence that adding mRNA vaccines to checkpoint inhibitors can reduce the recurrence of other forms of cancer. That sentiment is not a strictly professional one. In March, Dr. Weber underwent surgery for pancreatic cancer, and he hopes to enter a vaccine trial after he completes chemotherapy.

“We’re going to keep chipping away until almost nobody has a recurrence,” he vows. “I may not live long enough to see it happen. But as that famous philosopher Frank Sinatra used to say, the best is yet to come.”



TO FIND A DOCTOR WHO TREATS
MELANOMA, VISIT NYULANGONE.
ORG/MELANOMADOCTORS OR
CALL 212-731-6000.

How Personalized Cancer Vaccines Work

Experimental mRNA vaccines exploit the tendency of cancer cells to generate mutated proteins, or neoantigens. When targeted by a personalized vaccine, those unique proteins serve as beacons to draw in cancer-killing immune cells.

1

SAMPLE

Biopsies collect both normal and cancerous tissue samples from a patient.

2

SEQUENCE

Rapid DNA sequencing compares the patient's normal and cancerous tissue, and then identifies proteins generated exclusively by tumor cells. These are called neoantigens.

3

DESIGN

DNA sequences provide the template for creating mRNA strands that match up to 34 neoantigens unique to the patient's tumor cells.

4

MANUFACTURE

One batch of vaccine is created for a single patient.

5

ADMINISTER

The custom vaccine spurs the recruitment of T cells to attack cancer cells that produced the targeted neoantigens.



#TheBestOutcomes

What It Means to Be #1 in New York State for Pediatric Cardiology and Heart Surgery

For a five-year-old, Sammie Taormina has a very full schedule. He started kindergarten in September, but his extracurricular activities have not suffered one bit. He's learning to swim, skateboard, and graduate from a scooter to a two-wheeler. He started playing soccer last spring, and his coach says he has real potential. "Sammie doesn't let anything slow him down," says his mom, Jessie. "We have to run to keep up with him."

What makes Sammie's zest all the more impressive is that he has had several open-heart surgeries to treat a rare congenital condition known as hypoplastic left heart syndrome (HLHS). Dubbed "half a heart syndrome," it leaves the left side of the heart so underdeveloped that it struggles to pump blood to the rest of the body. Thirty years ago, the survival rate for the approximately 960 babies born in the US annually with HLHS was less than 5%. Today, thanks to a series of three reconstructive surgeries, the five-year survival rate has increased to 70%, with a 90% long-term survival rate for children who reach their first birthday.

In September 2018, Jessie, then a nurse at NYU Langone Hospital—Brooklyn, gave birth to Sammie at Tisch Hospital. He had his first heart operation 17 days later, followed by a second surgery in March 2019 and a third in September 2020. Each procedure was performed by Ralph Mosca, MD, MBA, now the Henry H. Arnhold Chair of Cardiothoracic Surgery and chief of the Division of Pediatric and Adult Congenital Cardiac Surgery at NYU Langone Health.

Dr. Mosca, one of the world's top pediatric cardiac surgeons, helped define the modern-day surgical standard of care for HLHS patients in the 1990s. Today, he heads one of the nation's most successful programs for treating the disease, at Hassenfeld Children's Hospital at NYU Langone. The hospital is the highest-ranked in New York State for pediatric cardiology and heart surgery, based on the national specialty

At a follow-up visit with his doctors in 2019, after the second of three reconstructive surgeries, Sammie shared a smile with cardiologist Dr. Achiau Ludomirsky and cardiac surgeon Dr. Ralph Mosca.

ranking in the 2023–2024 *U.S. News & World Report's* "Best Children's Hospitals" guide. The hospital is also recognized as one of the top 15 children's hospitals in the nation for pediatric cardiology and heart surgery.

These distinctions are the latest in a growing number of accolades earned by Hassenfeld Children's Hospital and its Pediatric Congenital Heart Program, which treats the most complex forms of heart disease, including those that require transplantation, and performs nearly 250 operations annually. The program has the best risk-adjusted survival rate of any hospital in New York State for pediatric patients and stands among the best in the nation, according to the Society of Thoracic Surgeons and a report from the New York State Department of Health. The report takes into account the complexity of care at the time of surgery, as well as the number of children treated for the condition at the institution.

"There is nothing more gratifying than to see how well children are doing after a major heart procedure, whether it's a month or many years later," says Dr. Mosca.

Sammie now lives in Boston with his mom; his father, Nicolo; and his brother, Russell. Dr. Mosca and cardiologist Achiau Ludomirsky, MD, get to see him enjoying his childhood to the fullest in the photos Jessie sends them. "We're so grateful for everything the team did for us," says Jessie. "To watch him thrive is so amazing. Every day with Sammie is a gift."



TO FIND A DOCTOR WHO TREATS PEDIATRIC HEART CONDITIONS, VISIT [NYULANGONE.ORG/PEDIATRICHEARTDOCTORS](https://www.nyulangone.org/pediatricheartdoctors) OR CALL 212-263-5940.



Hassenfeld Children's Hospital at NYU Langone outperforms the national average for clinical outcomes, complication rates, and length of hospital stay. The institution's overall survival rate is 98.4%, compared with a national rate of 97.3%. For neonates, the survival rate is 97.4%, compared with a national average of 92.6%.



Sammie Taormina joins his younger brother, Russell, in a full range of activities. "Sammie's allowed to do anything he feels comfortable doing," says his mom, Jessie.





Abigail Campbell, MD, director of the Center for Women's Sports Medicine at NYU Langone, was a high jumper competing nationally in high school when a stress fracture derailed her athletic ambitions. Her injury motivated her to become an orthopedic surgeon.

[Bouncing Back](#)

Injured Your ACL?

Here's What You Need to Know.

For many athletes, the anterior cruciate ligament, or ACL, is a rubbery band of terror best known for its potential to fail under strain and ruin a season or even end a career. Anatomically, it tucks deep in the center of the knee joint and connects the thigh bone to the shin bone. The ACL stabilizes the knee as it bends and rotates. That role, unfortunately, also makes it vulnerable to sharp pivots and sudden lateral forces that can cause it to tear or snap, leaving the knee loose and unstable. Traditionally, most ACL injuries require reconstruction of the ligament with a tendon from a donor or the patient's own body. But rapid advances are making it increasingly possible to repair a patient's existing tendon rather than reconstructing it.

If you've injured your ACL, here are four things you should know, according to top orthopedic surgeons within the Department of Orthopedic Surgery at NYU Langone Health, ranked #5 in the nation, according to the 2023-24 rankings from *U.S. News & World Report*.

“When we evaluate a patient, we're examining the knee, yes, but we're also trying to understand the patient's goals and lifestyle rather than just looking at an MRI and applying the same surgery every time.”

—Abigail L. Campbell, MD, director of the Center for Women's Sports Medicine at NYU Langone

1

FOR REPAIRS, TIMING MATTERS

For reasons still not fully understood, the fluid surrounding the ACL seems to interfere with its ideal healing. If the goal is to repair your existing ACL, the sooner you fix it, the better. “Within two to three weeks, the tissue may be repairable,” says NYU Langone orthopedic surgeon Guillem Gonzalez-Lomas, MD. “But not long after that, the ligament will retract and scar.” In Dr. Gonzalez-Lomas's practice, less than 10% of ACL injuries qualify for a repair, where the existing ligament is physically reattached to the bone it tore from and reinforced with high tensile-strength sutures. Tears directly off the femur are better candidates for repairs since the ligament can be more securely reattached to the bone. A new biological implant approved by the FDA in 2022 called the BEAR, for Bridge Enhanced ACL Repair, may augment the healing environment. The implant is a spongy cylinder of collagen derived from cows. About the size of two stacked marshmallows, it's saturated with the patient's own blood prior to implantation, which in theory primes the fluid surrounding the ACL for healing. “There are a lot of benefits to being able to keep your own tissue, but the implant isn't a slam dunk just yet,” notes Dr. Gonzalez-Lomas, who has performed several repair procedures using the BEAR.

For one, the strength of the repaired ligament over time is still unknown. “We're waiting to see the long-term data,” he says. And in some cases, the early recovery period after a BEAR implant can be more restrictive than it is for an ACL reconstruction, with patients typically required to avoid putting any weight on the knee for at least 4 weeks. “The implant is currently marketed for any kind of ACL tear, but I'm very judicious in my selection process,” notes Dr. Gonzalez-Lomas. “For me, the ideal patient has recently torn their ACL, specifically off the femur bone, with ample remaining ligament tissue,” he says. “And they're fully committed to scrupulously following their rehabilitation regimen.”

2

YOUR ACL MAY BE BEYOND REPAIR, BUT A RECONSTRUCTION IS OFTEN MORE DURABLE

Most serious ACL injuries that cause knee instability and pain require reconstruction surgery. But it all depends on the patient. Orthopedic surgeons at NYU Langone take into consideration the severity of the injury, its location, any collateral damage within the knee, your age, your overall health, and your activity level, among other factors. “We often see full ruptures, where the ligament gets overstretched like a rubber band and eventually pops,” explains orthopedic surgeon Abigail L. Campbell, MD, director of the Center for Women’s Sports Medicine. “In these cases, the standard approach is a reconstruction surgery, where the ligament is replaced,” she says. “An overstretched ligament will be permanently deformed.” During a reconstruction procedure, the surgeon makes a small incision in the knee to remove the injured ligament.

Typically, if you’re under 30 years old, the surgeon will replace your damaged ligament with a tendon graft taken from your patellar tendon, hamstring, or quadriceps tendon. The new tendon is then threaded through holes tunneled in your thigh and shin bones and secured in place with screws.

An estimated 90% of athletes who’ve undergone an ACL reconstruction at NYU Langone and adhered to the physical-therapy regimen heal well enough to return to their sport.

3

FIND A SURGEON WHO TREATS YOU, NOT JUST YOUR MRI

Every ACL injury is unique. “Not every patient has the exact same injury or the exact same goals,” says Dr. Campbell. “When we evaluate a patient, we’re examining the knee, yes, but we’re also trying to understand the patient’s goals and lifestyle rather than just looking at an MRI and applying the same surgery every time.” Is your goal to garden and walk without pain? Or is to get back to playing professional soccer or hockey? Your personal demographics and ambitions are critical in helping a physician assess your treatment options.

For example, female athletes are up to 8 times more likely to injure their ACL due to a combination of mechanical and hormonal differences that can make the ligament more vulnerable. “I treat bones and joints, but these are attached to a whole-body human being,” says Dr. Campbell. “There are specific factors you need to consider when treating female patients in general—things like hormonal changes at any age, menopause, bone density, and the risk of osteoporosis. Being connected to other specialists at the Center for Women’s Sports Medicine, a multidisciplinary hub, can make all the difference.”

4

YOUR PHYSICAL THERAPIST WILL BE YOUR NEW BEST FRIEND

Your rehab regimen is one of the biggest predictors of a successful outcome. “The relationship that the patient has with their physical therapist is arguably more important than the one they have with their surgeon,” notes Dr. Campbell. “I see a patient once every three months, but a physical therapist can see the patient for 12 months straight.”

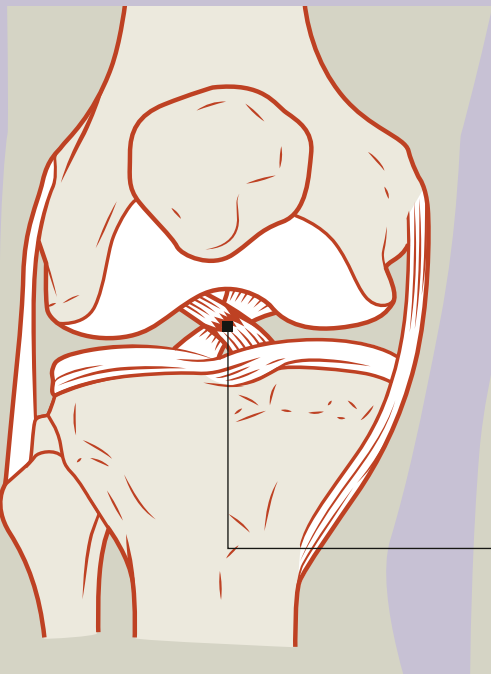
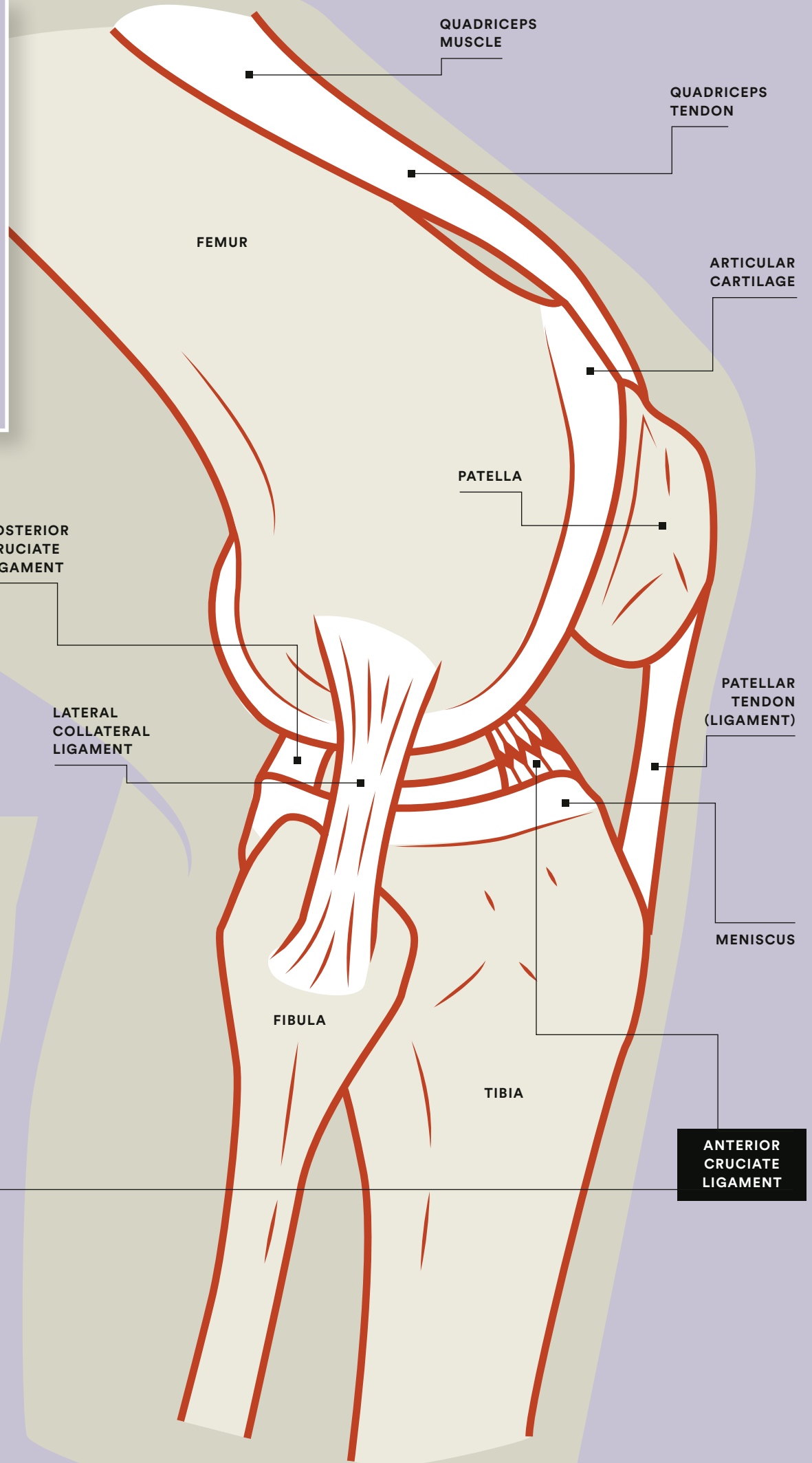
Orthopedic patients at NYU Langone are referred to NYU Langone’s Rusk Rehabilitation, consistently ranked the #1 rehabilitation program in New York State and one of the top 5 in the country by *U.S. News & World Report*. At Rusk, patients have the benefit of top-trained physical therapists and state-of-the-art technology at the Sports Performance Center, where they receive the highest quality evaluation for returning to sport. “There’s a very specific set of criteria involving qualitative and quantitative factors for assessing an athlete’s readiness to return to sport,” notes Dr. Campbell. “It can be difficult to find a center that offers this comprehensive return to play testing, but this is available with the sports-trained physiotherapists at Rusk.”



NYU Langone orthopedic surgeon Guillem Gonzalez-Lomas has treated thousands of ACL injuries. In his practice, less than 10% of cases qualify for a repair, although new technology is changing that.

Know Your Knee

The knee is the largest joint in the human body. It's stabilized by four primary ligaments. Despite its capacity to withstand tremendous force, the anterior cruciate ligament, or ACL, is commonly injured during sports like soccer and basketball that involve sudden stops and sharp pivots. It has a limited ability to self-heal once torn, and a complete tear often requires surgical intervention.



Mindset

Bringing the Art of Hospitality to the Doctor's Office

The words “hospital” and “hospitality” derive from the same Latin word meaning “guest.” At NYU Langone Health, bridging those two service-oriented fields is core to delivering the very best patient experience. “We are in the hospitality business,” notes Robert I. Grossman, MD, dean and CEO, “and we have a unique opportunity to make a lasting impact by going above and beyond to make patients and colleagues feel valued and special.”

Building on best practices from the hospitality industry, NYU Langone has launched a strategy for its more than 330 Faculty Group Practice (FGP) locations that sets the standard for how staff and clinicians should communicate and engage with individuals, and how they can optimize these encounters. Implemented in August 2022, the program is called FGP C.A.R.E.S. The letters stand for *Connect* with patients and colleagues; *Align* with their needs; *Respond* with timely, effective options; *Ensure* that expectations are met; and *Sign off* to complete the interaction.

The idea to create this program had actually been percolating for some time in the mind of Andrew Rubin, senior vice president for clinical affairs and ambulatory care. He engaged the Ritz-Carlton Leadership Center to tailor its legendary customer experience model to NYU Langone’s rapidly expanding FGP network. “Knowing the quality of the Ritz-Carlton brand, I wanted to create a patient experience template for our network that was as close to that model as possible,” explains Rubin. “You may not look forward to a doctor visit the way you would a hotel stay, but what makes the experiences similar is the need to make your guests feel welcome and comfortable when they arrive and throughout their journey.”

The program provides a framework for expectations and behaviors to guide employees when they engage with others—whether patients or colleagues, whether face-to-face, over the phone, or electronically. “We’re transforming the culture

of how we engage with each other,” says Maya Levy-Merdinger, senior director of ambulatory operations and optimization.

Throughout this training, a wide range of frontline staff are coached on how to build an emotional connection with patients and colleagues alike, ensuring quality and consistency for every encounter, every time. “We have a big network, and as it continues to grow, one of the challenges is maintaining a consistent patient experience,” notes Fran Drummond, vice president of ambulatory operations and optimization. “We want a patient to walk into any NYU Langone FGP office and be able to say, ‘I know this is the right place for me because I can see and feel how much they care.’”

Every month, Rubin and his team learn of employees who have gone above and beyond to enhance a patient’s experience. They call them “Wow Stories.” Recently, for example, a patient was scheduled to see his doctor at NYU Langone Medical Associates—Shoreham, on Long Island. While making the appointment, office assistant Desiree Bender noted that the forthcoming visit was on the patient’s 100th birthday. She and medical assistant Derek Castro presented him with a cake and joined his daughter as they

sang “Happy Birthday!”

Rubin says that it’s rewarding to see the results of this work, pointing to reviews from patient surveys that have been overwhelmingly positive. “Our satisfaction scores have gone up in every category since the launch,” he reports. “Now, the key is to maintain the results. This is not a one and done—it has to go on forever. This program will help define who we are and who we want to be as a healthcare network.”

So far, over 6,000 frontline workers have completed C.A.R.E.S. training, as well as Dean Grossman; Andrew Brotman, MD, executive vice president and vice dean for clinical affairs and strategy, chief clinical officer; and Rubin himself. To ensure continued success, this fall NYU Langone is expanding the program to the network’s physicians and other clinicians, who will attend 90-minute, in-person training sessions.

“We’ve consistently ranked as the #1 ambulatory care system in the US by Vizient, the nation’s largest healthcare performance improvement organization,” says Rubin. “We want to maintain our lead and continue to distinguish our network. We’re reinventing ourselves every day, every month, every year to help attract and retain people who want to work for the best.”

“You may not look forward to a doctor visit the way you would a hotel stay, but what makes the experiences similar is the need to make your guests feel welcome and comfortable when they arrive and throughout their journey.”

—ANDREW RUBIN, SENIOR VICE PRESIDENT FOR CLINICAL AFFAIRS AND AMBULATORY CARE

Nicole Davila helps a patient check in at the Joan H. Tisch Center for Women’s Health, one of more than 330 Faculty Group Practice locations at NYU Langone whose staff have completed C.A.R.E.S. training.



Joan H. Tisch
Center for Women's Health



ENSURING A POSITIVE PATIENT EXPERIENCE EVERYWHERE, EVERY TIME

“Every individual plays a critical role in the patient experience,” says Fran Drummond, vice president of ambulatory operations and optimization. “Every touch point has an impact on how patients perceive us as an organization.” In that vein, the C.A.R.E.S. program sets the stage for stellar performances with a three-hour training session that uses three modules to refine key interpersonal skills:

- **The Polished Professional** reinforces how individuals say things, including tone of voice and body language, and how to make patients feel welcome.
- **Optimize Every Interaction** stresses the fundamentals of the patient and collegial experience, focusing on five key skills that lend the program its name: **C**onnect with patients; **A**lign with their needs; **R**espond with timely, effective options; **E**nsure that expectations are met; and **S**ign off to complete the interaction.
- **The Art of Service Recovery** addresses how to support a patient when an issue arises, providing a proper response and escalating if necessary.



550 First Avenue
New York, NY 10016

#1 for quality care in the U.S.

#TheBestOutcomes



NYU Langone is top-ranked based on safety, equity of care, effectiveness, efficiency, mortality, and patient-centeredness. This recognition matters—because the stakes are too high to be second.

Source: 2023 VIZIENT Quality and Accountability Ranking. Ranked #1 out of 116 participating comprehensive academic medical centers and #1 out of 62 participating ambulatory networks.



See what makes us #1



Kenneth G. Langone CHAIR, BOARD OF TRUSTEES
Robert I. Grossman, MD DEAN AND CEO
Elizabeth Golden EXEC. VICE PRESIDENT, COMMUNICATIONS AND MARKETING
Nicole Dyer DIRECTOR OF PUBLICATIONS
Thomas A. Ranieri SENIOR EDITOR
Cynthia Ramnarace DIGITAL MANAGING EDITOR
Kate Ferguson ASSOCIATE EDITOR
Modus Operandi Design CREATIVE DIRECTION
Jonathan Kozowyk COVER PHOTOGRAPH

► For more information about NYU Langone Health, visit us online at nyulangone.org.

We Hear You. Submit your comments, story ideas, and subscription requests to publications@nyulangone.org.

Copyright © 2023 NYU Langone Health. All rights reserved.