Sweet Revenge

Turning Cancer’s Hunger for Sugar against Itself

ALSO INSIDE:

MSK Nurses Earn National Recognition

Vaccinating Our Patients against COVID-19

Improving the Health of NYC Taxi Drivers
MSK Nurses Receive Highest Honor with Renewed Magnet® Designation

What the nurse appraiser saw at Memorial Sloan Kettering was so extraordinary, she couldn’t speak. She and two colleagues from Magnet® — a national program that rates top nursing programs around the country — had just left a three-day virtual site visit at MSK. Now, she was on a Zoom meeting with MSK leadership, trying to put into words what she had witnessed.

“The appraiser was so overcome with emotion she had to defer to one of the others,” says Elizabeth McCormick, Senior Vice President and Chief Nursing Officer. “When she gathered herself, she said MSK has a nursing culture that other organizations only dream of. It just shows how we continue to raise the bar here.”

In November, for the second time, MSK received Magnet Recognition by the American Nurses Credentialing Center (ANCC). Bestowed every four years, it’s the highest national honor for nursing, given to only about eight percent of hospitals.

In the 2020 designation, the ANCC cited 12 exemplars — specific examples that highlight excellence in nursing — well beyond the impressive seven that MSK received in 2016. “MSK is the epitome of a learning organization,” said the ANCC in its report, highlighting the many programs that help nurses develop professionally. For example, the Publishing@MSK program, launched in 2017, guides nurses in developing and publishing manuscripts in clinical journals. Other exemplars recognized MSK’s excellent record in minimizing pressure ulcers and hospital-acquired infections — surpassing national benchmarks in every single inpatient unit. In all, the ANCC affirmed MSK’s nurses’ superb skills and compassionate care.

Even more extraordinary, MSK earned the second Magnet recognition as nurses cared for people with cancer during the COVID-19 pandemic. Ms. McCormick says, “It really shows the great resilience they have, to continue coming to work — despite personal risk — and giving care to our patients and supporting them emotionally in new ways, like when they couldn’t have visitors.”

The honor is especially gratifying to Ms. McCormick, who has led the nursing department for 20 years after beginning her career at the bedside herself. In March, she announced she would be retiring from MSK at the end of 2021. “I started out as a nurse to make a difference in the lives of individual patients,” she says. “At MSK, it’s been about supporting the more than 5,000 nurses here so every one of them can give the best possible care.”

“It really shows the great resilience [our nurses] have, to continue coming to work — despite personal risk — and giving care to our patients and supporting them emotionally in new ways, like when they couldn’t have visitors.”

—Elizabeth McCormick
Giving COVID-19 vaccines to MSK patients has been a priority for the hospital this year.

Knowing that patients are anxious about getting protected from the virus, which is especially devastating to people with cancer, the MSK COVID-19 Vaccine Care Team and countless other healthcare heroes at MSK have been working around the clock to deliver the lifesaving vaccines as quickly as possible to as many people as possible. It’s been a major challenge because supply is limited and MSK’s allotment is determined by New York State and New York City.

“Vaccinating our patients, and getting the vaccine ourselves as healthcare workers, is one of the most important things we can do right now to help end this terrible pandemic,” says Chief Medical Epidemiologist Mini Kamboj, who leads the COVID-19 Vaccine Care Team along with Chief Pharmacy Officer Scott Freeswick.

“One down! One more to go!!!” wrote patient Ann Caruso on Instagram when she got her vaccine. “So happy to do my part and feel a little safer in this world.”

Visit mskcc.org/covid19-vaccine for more information.
Sweet Revenge:
Taking Advantage of Cancer Cells’ Hunger for Sugar and Other Nutrients

Americans have a love-hate relationship with sugar. Our favorite foods are full of it, yet nutritionists warn that sugar provides empty calories — good for putting on weight but not much else. Cancer doctors are concerned, too, since obesity is a major risk factor for cancer.

Scientists have known for over a century that cancer cells have a great appetite for sugar. It’s the basis for the diagnostic imaging test called a PET scan. Tumors take up sugar at much higher rates than normal cells, and you can see this difference on film: the darker the spot, the higher the sugar uptake.

Why cancer has such a taste for sugar is not fully understood. But researchers at Memorial Sloan Kettering are taking a fresh look at this and related questions about cancer metabolism. By understanding the unique ways that cancer cells break down and use sugar and other nutrients, scientists hope to be able to turn cancer’s appetite against itself.

What’s in the White Stuff?
When most people hear the word sugar, they think of the white crystals that give cakes and pastries their sweetness. This particular form of sugar is sucrose, which is actually a combination of two different sugar molecules, glucose and fructose, linked by a chemical bond.

When we eat foods containing sucrose, our bodies break it apart into glucose and fructose molecules. Glucose is one of the body’s main fuels. It is delivered to our muscles, which use it for energy, while fructose is quickly used up by the liver or converted to glucose.

Fructose has a fleeting existence in the body, which is why it hasn’t received as much attention from cancer researchers as glucose. But that’s beginning to change. In December 2020, molecular pharmacologists Kayvan Keshari and Michael Kharas published a study in the journal *Cell Metabolism* that looked at fructose’s role in leukemia. The scientists became interested in the topic after observing high levels of fructose in the bone marrow of people with acute myeloid leukemia (AML), a type of blood cancer.

“Fructose sugar really shouldn’t be present at those levels in the bone marrow,” Dr. Keshari says. “We wondered: What if fructose is present in high amounts around the AML cells? If so, can they use it, and what are they doing with it?”

What’s Sugar Doing in People with Leukemia?
To answer these questions, the researchers designed a system to follow what happens when AML cells are fed a diet of fructose.
“It raised the question: Could we create a situation where we force the cancer cells to use the serine synthesis pathway — and then we block the pathway so that the cells die?”

—Kayvan Keshari
They discovered that AML cells can indeed consume the fructose, but they must metabolize it in a unique way: They launch a series of chemical reactions called the serine synthesis pathway (SSP). The SSP is an alternative means of metabolizing sugar, one that can be blocked with the use of drugs. That gave the researchers an idea. “It raised the question: Could we create a situation where we force the cancer cells to use the serine synthesis pathway — and then we block the pathway so that the cells die?” Dr. Keshari says. It would be like forcing traffic to an off-ramp that leads to a dead end.

The researchers explored doing just that by using mouse models of leukemia. They injected mice with fructose and then gave them anti-SSP drugs. It worked. This combination effectively prevented leukemia growth in the mice. The hope is that this approach will have the same effect in people with leukemia.

**Metabolism: Everything Old Is New Again**

Cancer biologists have been researching metabolism for 100 years. Back in the 1920s, a German biologist named Otto Warburg was the first to observe that cancer cells tend to consume extraordinary amounts of glucose and break it down in a seemingly inefficient way called aerobic glycolysis — now known as Warburg metabolism. His discovery led to a flurry of research into the relationship between metabolism and cancer and also biochemical pathways. Textbooks are filled with these studies.

But interest in metabolism began to wane in the 1940s, when scientists discovered that DNA contains our genetic information. From that point on, determining how genes work took center stage among many biologists.

But metabolism is hot once again — thanks in part to work done by MSK researchers over the past decade. They have found that the molecules of metabolism can directly influence the work a cell performs, including turning certain genes on or off, which can lead to cancer.

Those discoveries have encouraged researchers to dust off their textbooks and revisit Warburg’s century-old observation, this time applying what they’ve learned about genes, proteins, and signaling pathways.

**The Commander-in-Chief of Metabolism**

One such researcher is Sloan Kettering Institute immunologist Ming Li. In a paper published in January 2021 in *Science*, he and his colleagues discovered a new reason why fast-dividing cells, like cancer and immune cells, rely on Warburg metabolism in the first place.

It comes down to a link between Warburg metabolism and the activity of a powerhouse enzyme in the cell called PI3 kinase.

Ming Li says PI3 kinase acts like a commander-in-chief in cancer. It sends the signal for cancer cells to divide and multiply.
“PI3 kinase is a key signaling molecule that functions almost like a commander-in-chief of cell metabolism,” Dr. Li says. Only PI3 kinase can give the orders for the cellular tasks that require a lot of energy — including cell division.

**Taking Away the Chief’s Megaphone**

As cells shift to Warburg metabolism, the activity of PI3 kinase is increased, and in turn, the cells’ commitment to divide is strengthened. It’s a bit like giving the commander-in-chief a megaphone.

Dr. Li and his team also found what could silence the megaphone. They discovered that in mice, immune cells lacking the enzyme LDHA could not sustain their PI3 kinase activity.

Though uncovered in immune cells, the finding has clear implications for cancer. “PI3 kinase is a very critical kinase in the context of cancer,” Dr. Li says. “It’s what sends the signal for cancer cells to divide and multiply, and it’s one of the most overly active signaling pathways in cancer.”

The big idea is this: Cancer cells may employ Warburg metabolism as a way to keep marching, dividing, and growing. The results raise the intriguing possibility that doctors could curb cancer growth by blocking LDHA — the Warburg “switch.”

**But It’s Not All Sugar’s Fault**

With all this talk about sugar and cancer, it’s easy to get the idea that sugar is a demon substance to be avoided at any cost. Not really. Sugar is, of course, present in sweeteners, but it is also a natural component of many foods, including fruits and vegetables, breads, and meats. These foods contain sugar in the form of complex carbohydrates, which are long, interconnected chains of glucose.

When your body digests food, it breaks down these complex chains into glucose molecules. Those it cannot digest become fiber, which is good for you.

The problem is not sugar per se, but added sugar — sugar that is added to foods without the accompanying fiber and other nutrients provided by fruits, vegetables, and whole grains.

It’s simply not possible to completely remove sugar from your diet, nor is there any reason to try. Sugars are a necessary part of a healthy diet. Your brain runs primarily on glucose, and your immune system needs it to function, too. What’s more, even if you never picked up another piece of bread or chocolate again, your blood would still contain plenty of glucose because it can create it from other ingredients.

And sugar isn’t the only nutrient that cancer cells need to grow. Besides sugar, cancer cells also rely on other nutrients, including fats and amino acids. Some of these can have more dramatic effects than sugar — even influencing the formation of cancer in the first place.

**SKI cell biologist Lydia Finley** recently discovered the critical role played by amino acids in squamous cell carcinoma, a cancer that arises from stem cells in the skin. Stem cells have the unique ability to divide throughout life to replace cells that die or wear out.

**Starving Cancer Stem Cells**

Using mouse models and cells growing in a dish, Dr. Finley and her colleagues in the Elaine Fuchs Lab at The Rockefeller University found that the amount of an amino acid called serine in a stem cell’s environment determines its decision to keep dividing in its current form — or to differentiate and grow up. Differentiated cells generally do not form cancer.

“The stem cells that give rise to squamous cell carcinoma seem to be highly dependent on extracellular serine for their growth,” Dr. Finley says. The team is currently looking for ways that they might be able to keep cancer stem cells from taking up serine in the hope of curbing cancer growth.

“Trying to ‘starve’ these cells of this source of serine could be a strategy to try to curb their growth.”

— Lydia Finley

Lydia Finley and graduate student Sanjeethan Baksh

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DO THE RIGHT THING

How the MSK Immigrant Health & Cancer Disparities Service is improving people’s lives in communities that too often get overlooked

A New York City taxi garage at 4:00 AM may seem like the last place to look for medical advice. But that made it perfect for internist Francesca Gany and her team of ten. Before dawn on a January day in 2016, they set up a health fair amid the grinding noise and choking exhaust fumes.

As members of Memorial Sloan Kettering’s Immigrant Health and Cancer Disparities Service (IHCD), the mission of Dr. Gany and her team is to bring healthcare to people who often fall through the cracks. “During our screenings that day,” recalls Dr. Gany, “we had to immediately refer two drivers to the emergency room.” She explains that “one man had diabetes that was so out of control that he drove his cab every day with gallons of water in the passenger seat because he was so thirsty from his elevated blood sugar.”

One week later, the man, an immigrant from Pakistan in his late 30s, visited the staff at IHCD to thank them, saying “that he was now on medication and felt like a new man,” recalls Dr. Gany.

Those kinds of successes are hallmarks of the IHCD, which marks its tenth year at MSK in 2021. The service is dedicated to promoting health equity for immigrants, minorities, and other underserved communities. And the efforts throughout every corner of New York City have grown to influence healthcare initiatives on a national level and are used as a model around the world.

Making the Connection

MSK invited Dr. Gany to establish the IHCD in 2011, 15 years after she began the program’s forerunner at New York University School of Medicine. At MSK, the service has grown to serve thousands of people every year by connecting them with health insurance, teaching them about their health, screening them for cancer and cardiovascular risk factors, helping them navigate through cancer treatment, and much more.

“Our staff are from the communities that we serve,” Dr. Gany explains. “Many
are themselves first- or second-generation Americans who are deeply familiar with the issues of their communities and speak the language.” The tight-knit staff of the IHCD is now more than 50 strong and hails from 21 countries, representing Asia, Africa, the Middle East, Europe, all parts of the Spanish-speaking world, and the Caribbean.

That wide breadth of perspective means the IHCD can conduct targeted outreach. The Arab Health Initiative, for example, has conducted health education efforts involving nearly 8,000 women and children, provided crucial support services for 150 cancer patients, and helped hundreds more people get cancer screenings. Ventanilla de Salud (which means “health window”), aimed at Spanish speakers, has given health screenings to more than 950 people and helped nearly 9,000 people get social work and healthcare assistance.

**Yo, Taxi!**
Another pillar of the IHCD is to deliver services where people are — no matter how unconventional the setting. That’s what led to the outreach to cab drivers, called the Taxi Network. Dr. Gany explains that “even though taxis are so visible, the drivers are often unseen by the healthcare system.”

Many can’t visit healthcare centers during business hours. In addition, she says, “They have so many cancer and cardiovascular risks: Their work is very sedentary, they endure high stress because of traffic and passengers, and they suffer high exposure to dangerous particulates.”

To help, the IHCD sets up healthcare fairs in taxi garages, with blood pressure monitoring, risk assessments for prostate and colorectal cancers, and more. Nearly 15,000 people have participated so far.

**A Helping Hand**
A major focus of the IHCD is the fundamental act of communicating. Dr. Gany explains, “One out of every four New Yorkers has limited proficiency in English. That can make it so much more difficult to get healthcare.” In fact, she continues, “our surveys have found that 16 percent of cancer patients who have limited English proficiency do not know their cancer diagnosis.”

To help, the IHCD provides a wide array of translation services and even teaches translators how to be more effective advocates.

“What we do is so rewarding. And it’s also an indication of how just a little bit of human kindness goes such a long way.”

— Francesca Gany
Then there are the nonmedical needs that can have a major impact on health. Dr. Gany recalls, “We helped a mother in her late 20s who was diagnosed with breast cancer not long after giving birth.” To care for the family’s other children during her treatment, the woman’s husband had to leave his job, plunging the family into dire financial straits.

The IHCD stepped in with supplies for the children and groceries, and the woman and her family are now doing well. Dr. Gany explains, “We know that when people are going through cancer, things like food and rent assistance, childcare, and health insurance can literally save their lives, even though they aren’t medical treatments per se.”

**The Pandemic Response: Coming Full Circle**

The IHCD also responded quickly to the job losses so many people suffered in the wake of COVID-19. The program’s signature **Food to Overcome Outcome Disparities (FOOD) Pantry** has seen the number of people using its service go up threefold since March 2020.

To help deliver more than 10,000 bags of groceries to more than 600 cancer patients, the FOOD Pantry program gratefully accepted the help of MSK transportation drivers. The IHCD also reached out to taxi drivers who had attended health fairs — could they lend a hand?

Sure enough, taxi drivers who the IHCD had helped stepped up during the hour of need to deliver groceries to cancer patients. For Dr. Gany, it proved that the service’s outreach had come full circle. “What we do is so rewarding. And it’s also an indication of how just a little bit of human kindness goes such a long way.”

**The International Angle**

The insight came at 2:00 AM as Memorial Sloan Kettering surgeon Peter Kingham operated on a man with rectal cancer in Ile-Ife, Nigeria, in 2012. Alongside him was Isaac Alatise, a Nigerian surgeon who trained at MSK.

As they operated, Dr. Kingham says, “We recognized that so much about cancer was different in Nigeria, even the kinds of patients we were seeing.”

That insight, says Dr. Kingham, who has spent decades doing medical work in sub-Saharan Africa, led him and MSK oncologic surgeon Sir Murray Brennan to create the **MSK Global Cancer Disparities Initiatives** program.

The mission is to help build capacity to improve screening, care, and outcomes in lower-resource environments. To drive home the need, Dr. Kingham uses a stark illustration: “In America,” he explains, “you can visualize the typical breast cancer tumor as the size of a pea. In Nigeria, the typical tumor is the size of an orange.”

To improve cancer screening and treatment, the MSK effort collaborates with Nigerian counterparts. Research on the ground helps identify promising new technologies, like a handheld breast screening ultrasound tool that connects to a tablet. “Instead of massive and expensive mammogram infrastructure,” says Dr. Kingham, “with these new devices, a provider can easily carry them to a community center to screen for breast cancer.”

The team of 20 in New York also leverages MSK strengths, such as sequencing tumor samples to identify genetic targets for therapy and digitally connecting doctors in Nigeria with world-class MSK pathologists for training and collaboration.

The result, says Dr. Kingham, helps save lives and prevents suffering, “and hopefully will be applicable across the African continent and beyond.”
This year marks the 50th anniversary of the “War on Cancer,” launched when President Richard Nixon signed the National Cancer Act in 1971. As America commemorates the milestone, the question for the future is: “Where do we go from here?” At Memorial Sloan Kettering, the direction is clear: stopping the spread of cancer.

Cancer spread, or metastasis, is the cause of 90 percent of cancer deaths. No improvements in surgery, radiation, chemotherapy, and immunotherapy will meaningfully boost survival statistics unless scientists are also able to finally stop cancer’s recurrence or tackle it once it spreads.

“We are committed to solving the mystery of metastasis,” says Sloan Kettering Institute Director Joan Massagué. “We’ve made great strides in understanding the fundamental biology of the process, and new breakthroughs are on the horizon.”

Recent advances include discovering that metastatic cells co-opt the body’s natural wound-healing pathways to hide from the immune system, resist chemotherapy, and take root in new locations. The tumors these cells produce are quite different from the original and much more difficult to eradicate. But knowing their reliance on these pathways opens up new avenues of treatment.

Like all medical breakthroughs, these advances are being driven by fundamental research that requires dedication, resources, and a respect for the scientific process.

“It is gratifying to see the role of scientists elevated in the new administration,” says Dr. Massagué, noting the Director of the Office of Science and Technology Policy is now a cabinet-level position. “President Biden lost his son to brain cancer and has led the Cancer Moonshot initiative. We are hopeful for more support of rigorously conducted research that has the potential to benefit us all.”

The next issue of MSK News will be devoted to explaining the critical work being done throughout MSK to forge a new frontier in the War on Cancer.

“"We are committed to solving the mystery of metastasis."

— Joan Massagué
Why did you become a nurse?
In high school, I volunteered at a local hospital. The experience helped me realize how much I loved helping people. I went to college, got accepted into nursing school, and was the first member of my family to receive a college degree. That was a very proud moment, especially for my parents. While I was in nursing school, I joined MSK’s Clinical Assistants Program, where students spend ten weeks gaining real nursing experience. I met excellent nurses, and I really loved how they mentored me. I was hired as a nurse at MSK shortly after I graduated.

What makes oncology nursing special?
Oncology nurses are unique because we have the skills to assess subtle changes in our patients and anticipate their needs. It’s an honor to help them through their journey. I never thought I’d work in oncology, but I love the pace and the environment.

One of my roles is to answer questions and debunk myths about cancer and cancer treatment. It’s so hard to hear that you or a loved one will need cancer treatment. When I first meet a patient and their loved ones, my goal is to establish trust and a strong relationship that translates into, “We are here to hold your hand every step of the way.”

What else do you tell them?
Cancer treatments have come a long way and there is an array of options. We can modify the time frame of treatment: It can be flexible so you can fit in special events that are important to you. We listen to what is valuable to you and help you live life.

What has it been like to be a nurse during COVID-19?
It’s been challenging. I’ve had moments of being nervous. But today, we know much more about COVID-19 than we did at the beginning. We’re here to help patients and care teams make the best decisions. It’s a big responsibility. Thankfully, people have jumped in to help, and we’ve always had access to personal protective equipment so that everyone can be safe.

How do you stay grounded today?
My motto is to take it day by day. It’s overwhelming if you look at it all together.

You were recently in an MSK television commercial about the importance of people continuing their cancer care during COVID-19. What was that like?
That was exciting. It sent a very positive message to our community that we’re here and we want to help. I got calls from people I hadn’t heard from in years saying, “I saw you on TV!”

What’s one lesson we as a society should learn from COVID-19?
That we can get through tough times. I’m glad that MSK staff members and our patients are getting the COVID-19 vaccine. The more people we can get vaccinated, the sooner we’ll be able to put COVID-19 behind us.

How would you define a good day at work?
When I’m able to help a patient or another nurse resolve an issue, it’s an awesome day. Whether I’m getting somebody a wheelchair or helping a nurse change a bandage, every patient interaction reminds me of why I chose this profession.
Vern with his daughter, Alanna, at a Cycle for Survival event in 2019.

**Supporter Spotlight: Verdun Perry**

Verdun “Vern” Perry has taken part in Cycle for Survival since its inception in 2007. As a longtime friend of Jennifer Goodman Linn and Dave Linn, the founders of Cycle for Survival, Vern didn’t hesitate to join their cause to raise funds for rare cancer research. In 2010, it became even more personal for Vern: He lost his own sister, Fran, to the disease. Honoring her life has been his motivation for participating in Cycle for Survival every year. Since that first ride, Vern has rallied his friends and family to raise $1.5 million for this national movement to beat rare cancers.

“I’ve been able to grow support for Cycle for Survival because I am genuinely passionate about it. With cancer, we can’t afford to wait,” Vern says. To read more about Vern and his contributions to Cycle for Survival, visit mskcc.org/vern.

**The Society of Memorial Sloan Kettering Winter Lunch**

On February 3, The Society of MSK hosted its eighth annual Winter Lunch to support pediatric cancer care initiatives during the COVID-19 pandemic. The virtual event featured remarks from Andrew Kung, who is the Lila Acheson Wallace Chair and Chair of the Department of Pediatrics at MSK Kids. Kate Allen, Society President; Gillian Hearst, Society Associate Chair; and Nina Pickett, Senior Director of Pediatrics at MSK Kids also took part in the conversation with Dr. Kung.

To learn more about The Society, please visit society.mskcc.org.

**Health Education Seminars at MSK**

Join MSK Giving for a series of virtual seminars. These events offer a unique opportunity to hear from MSK researchers and learn how the generosity of supporters advances our work every day.

- **“Cancer Care in Older Adults” en Español**
  Beatriz Korc-Grodzicki
  Chief, Geriatrics Service
  April 28, 1:00 PM – 2:00 PM EDT

- **“Cuidado del cáncer para adultos mayores”**
  Beatriz Korc-Grodzicki
  Jefa del Servicio de Geriatría
  28 de Abril, 1:00 PM – 2:00 PM EDT

- **“Advances in Telemedicine”**
  The Cullum Society Connection and Fernanda C.G. Polubiaginof
  Director of Consumer Health Informatics
  May 26, 1:00 PM – 2:00 PM EDT

- **“Integrative Medicine”**
  Jun Mao
  Chief, Integrative Medicine Service
  June 23, 1:00 PM – 2:00 PM EDT

To register for these events, visit plannedgiving.mskcc.org/2021seminars.

The Society of Memorial Sloan Kettering, founded in 1946, is a volunteer-led organization within MSK dedicated to promoting patients’ well-being, supporting cancer research, and providing education on the early prevention, detection, and treatment of cancer.
APPOINTMENTS AND PROMOTIONS

John Hagen  
*Pediatric Anesthesiologist*  
Appointed as Associate Clinical Member; Department of Anesthesiology & Critical Care Medicine, Anesthesiology Service

Amy Duffield  
*Pathologist*  
Appointed as Associate Member, Memorial Hospital; Departments of Pathology & Laboratory Medicine, Hematopathology Service

Patricia Adem  
*Anatomic and Clinical Pathologist*  
Appointed as Associate Clinical Member; Department of Laboratory Medicine

Simon Mantha  
*Hematologist*  
Promoted to Clinical Member; Department of Medicine, Hematology Service

Igor Gavrilovic  
*Neuro-Oncologist and Neurologist*  
Promoted to Clinical Member; Department of Neurology, Neurology & Brain Tumor Services

Rekha Parameswaran  
*Hematologist*  
Promoted to Clinical Member; Department of Medicine, Hematology Service & Department of Laboratory Medicine

Simon Mantha was appointed to the Elizabeth and Felix Rohatyn Chair for Junior Faculty.

CAROL BROWN NAMED INAUGURAL INCUMBENT OF NICHOLLS-BIONDI CHAIR

Carol Brown was appointed as the inaugural incumbent of the Nicholls-Biondi Chair for Health Equity. Endowed through a gift from Jamie C. Nicholls, Vice Chair, MSK Boards of Trustees and Governing Trustees, and Chair, Memorial Hospital Board of Governing Trustees, and her husband, O. Francis Biondi, the Nicholls-Biondi Chair reflects MSK’s commitment to expanding patient access to cancer care and supporting ongoing research aimed at reducing cancer disparities that stem from racial, ethnic, cultural, or socioeconomic barriers.

ENDOWED CHAIRS

Michael Berger was appointed to the Elizabeth and Felix Rohatyn Chair for Junior Faculty.

KUDOS

For his extraordinary efforts during the COVID-19 pandemic, Neil Halpern (left) received the Founders Special Recognition Award from the Society of Critical Care Medicine.

Regina Bou Puerto, a member of the Alexander Rudensky Lab and third-year PhD student of the Weill Cornell Graduate School, won the Marie-Josée Kravis Women in Science Endeavor (Kravis WiSE) Graduate Fellowship. Mijin Kim, a member of the Daniel Heller Lab, won the Kravis WiSE Postdoctoral Fellowship.

Martin Tallman was elected President of the American Society of Hematology.

Daniel Heller was elected to the 2021 American Institute of Medical and Biological Engineering College of Fellows.

Esther Babady, Tobias Hohl, and Kenneth Marians were elected to the American Academy of Microbiology.

Andrea Schietinger was appointed to the Catherine and Frederick R. Adler Chair for Junior Faculty.
Kathryn Anderson was once asked to explain why she wanted to be a developmental biologist, and she answered with a poem:

**Beautiful embryos**  
*Full of life and mysteries*  
*You and I can solve*

Dr. Anderson’s sense of wonder about the beauty of embryos began when she was in eighth grade and read a *Life* magazine story on human development featuring detailed pictures of a human fetus. “That really captured my imagination,” she said years later.

Dr. Anderson joined Memorial Sloan Kettering in 1996 and became the founding chair of the Sloan Kettering Institute’s Developmental Biology Program when it was created in 2002. The program is known as one of the best in the world.

“Most senior principal investigators spend a lot of time in their offices, but Kathryn was always in her lab, working side by side with everyone else,” says SKI developmental biologist Danwei Huangfu, who earned her PhD in Dr. Anderson’s lab.

As a scientist, Dr. Anderson was best known for pioneering the use of a tool called forward genetics, used to understand how genes and their mutations affect growing embryos. Her study of fruit flies and mice made important contributions to understanding the genetic pathways of early development. Guided by the mutations that she observed, she explored many genes that are connected to birth defects and cancer.

Dr. Anderson received many awards throughout her distinguished career. She also held the Enid A. Haupt Chair in Developmental Biology at MSK.

For several years, Dr. Anderson was the only woman to lead a program within SKI. “When she recruited new people, her focus was on finding those who were doing the very best, most important science,” Dr. Huangfu notes. “But she created an environment in which women scientists could flourish.”

“Despite being from the West Coast, Kathryn became a consummate New Yorker,” says Kat Hadjantonakis, who was the first person recruited to join the Developmental Biology Program and became Chair when Dr. Anderson stepped down in 2019. “When she wasn’t in the lab, she partook in much of what New York has to offer. She was an avid fan of the arts, played the harpsichord and piano, and enjoyed going to the theater and listening to music ranging from contemporary to classical.”

Dr. Anderson was a deep thinker with an easy smile and eyes that lit up when describing her work. She died at her home at the age of 68 on November 30, 2020. She is survived by her husband, Timothy Bestor, a professor of genetics and development at Columbia University.
Straight Talk about Cancer

Everyone’s cancer experience is unique, but Memorial Sloan Kettering medical oncologist Diane Reidy-Lagunes noticed her patients asking the same questions: “Should I keep exercising?” “How can I manage the side effects of chemotherapy?” “Am I eligible for a clinical trial?” Equipped with her expertise and a microphone, she became the host of a new podcast series called Cancer Straight Talk from MSK. Each 20-minute episode features experts from across MSK who share the latest advancements and empower patients in their care.

Episodes present easy-to-understand explanations of a range of topics from immunotherapy to new surgical advances to the connection between sugar and cancer. Listeners hear from doctors as well as patients. The result is comprehensive and intimate.

“Every story starts with a patient,” says Dr. Reidy-Lagunes. “I always want to teach listeners something about oncology, but I also want to show how it translates to saving lives.”

Patients come from across the cancer spectrum, from the newly diagnosed to those at the end of life. One especially poignant episode featured Christine Cohen, a patient of Dr. Reidy-Lagunes who was facing terminal disease. The two spoke about the difficult decision to end treatment.

“The last few years have been defined by cancer, but I am not defined by cancer,” Ms. Cohen told Dr. Reidy-Lagunes. “That’s what I’d like the world to know.”

Ms. Cohen died eight days after their conversation. Their honest discussion sowed a seed for others.

“Some of my patients who weren’t ready to open the door to difficult conversations listened to the episode and said, ‘Tell me when we need to have the conversations you had with Christine,’” Dr. Reidy-Lagunes says.

More episodes of Cancer Straight Talk from MSK are in the works. Dr. Reidy-Lagunes says, “There are so many more important conversations to be had.”

Scan here to find Cancer Straight Talk from MSK