Mount Sinai Takes Leading Role in Developing New Technique to Treat the Most Devastating Form of Stroke

Spontaneous bleeding in the brain, known as intracerebral hemorrhage (ICH), remains the least treatable and most devastating form of stroke. While it accounts for only 15 percent of all strokes, it is a leading cause of mortality, morbidity, and disability worldwide, and few effective treatment options exist. Over recent months, however, Mount Sinai physicians have taken a leading national role in creating and implementing a new minimally invasive technique that is showing promise.

ICH occurs when a small artery in the brain leaks blood directly into surrounding tissue and forms a localized hematoma (clot), which continues to destroy neurons and causes life-threatening pressure on the brain. Loss of balance, blurry vision, and difficulty speaking are among the common symptoms, as well as headache and vomiting, which increase gradually over minutes to hours.

The effort is being led by J Mocco, MD, MS, Director of the Cerebrovascular Center at the Mount Sinai Health System, and Professor and Vice Chair for Education in the Department of Neurosurgery at the Icahn School of Medicine at Mount Sinai, and Christopher Kellner, MD, Director of the Intracerebral Hemorrhage Program at Mount Sinai and Assistant Professor of Neurosurgery.

Over the course of 15 months, they have treated nearly 50 patients with a novel strategy to evacuate blood clots using ultrasound imaging, performed on postoperative day 1 and shows complete evacuation of the hematoma.

New Transplant Facility Opens on Long Island

Comprehensive pre- and post-surgical follow-up care for adult patients undergoing liver, kidney, and pancreas transplants at the Recanati/Miller Transplantation Institute at Mount Sinai in Manhattan is now available at a new Mount Sinai Doctors facility in Hewlett, New York.

The Long Island Five Towns practice provides patients with the convenient expert care that is critical to their successful outcomes both in the weeks before surgery, when patients make regular office visits to check on their health and perform tests, and in post-surgical

Members of the Long Island Transplant office include, from left, Priya Grewal, MD, Associate Professor, Medicine (Liver Diseases), with, from left, Taneil Wilson, Maureen O’Reilly, RN, and Geena Mapoy, RN.
Study Finds Grandparents and Teachers Often Are Among the First to Suspect Autism

Children who have older siblings or frequent interaction with grandparents are diagnosed with autism spectrum disorders (ASD) earlier than those who do not, according to new research conducted at the Seaver Autism Center for Research and Treatment at Mount Sinai, and published in the journal *Autism*.

The study, titled “Grandma Knows Best: Family Structure and Age of Diagnosis of Autism Spectrum Disorder,” found that about 50 percent of friends and family members reported they had suspected a child to have a serious condition before they were aware that either parent was concerned. Maternal grandmothers and teachers were the two most common relationship categories to first raise concerns. “Our work shows the important role that family members and friends can play in the timing of a child’s initial diagnosis of autism,” says Joseph D. Buxbaum, PhD, the G. Harold and Leila Y. Mathers Research Professor, and Professor of Psychiatry, Genetics and Genomic Sciences, and Neuroscience, Icahn School of Medicine at Mount Sinai, and Director of the Seaver Autism Center. He is senior author of the paper, which was published online February 8, 2017. The study included colleagues at Columbia Business School and Carnegie Mellon University.

The team conducted an online survey of 477 parents of children with autism. In addition, they carried out novel, follow-up surveys with 196 “friends and family,” who were referred by parents. Eighty percent of the children with ASD were boys, and the median age of diagnosis was 35 months. Frequent interaction with a grandmother reduced the age of diagnosis by 5.18 months, and frequent interaction with a grandfather reduced the age of diagnosis by 3.78 months.

“Since early detection of ASD is critical to effective treatment interventions, we hope the study will serve as a call to action to encourage family and friends to share concerns early on,” Dr. Buxbaum says.

In other news, the Autism Sequencing Consortium, a multi-institute research group founded by Dr. Buxbaum, has received a $7 million extension of a grant from the National Institutes of Health to collect, analyze, and share samples and genetic data from people diagnosed with autism.

The Consortium now includes more than 40 international groups and 150 researchers who have generated gene sequencing data from 29,000 individuals, making it the largest such study to date in autism. All shared data and analyses are hosted on a supercomputer called Minerva, designed by Mount Sinai faculty, which enables joint analysis of large-scale data. The new grant will extend the project through 2022 and expand the sample to include more than 50,000 individuals.

New Transplant Facility Opens on Long Island (continued from page 1)

visits, when their immunosuppressant medications are carefully monitored.

“Patients are much happier, and they say they actually feel better knowing they don’t have to travel into the city for every visit,” says Priya Grewal, MD, Associate Professor, Medicine (Liver Diseases), who leads Mount Sinai’s liver transplant efforts on Long Island. The patients also understand that having the transplant procedure performed at The Mount Sinai Hospital is a critical component in ensuring a successful outcome.

“We have removed barriers and improved access to care,” says Vinita Sehgal, MD, Assistant Clinical Professor, Medicine (Nephrology), who leads Mount Sinai’s kidney and pancreas transplant efforts on Long Island.

Removing the stress associated with traffic, parking, and longer commuting time makes the entire process easier on patients and their families. While the actual transplant surgeries will continue to take place at The Mount Sinai Hospital in Manhattan, patients will be able to see the entire transplant team—doctors, nurses, social workers, nutritionists, and support staff—in the Long Island office. The location features a large, comfortable waiting room and plenty of parking.

Sander S. Florman, MD, Director of the Recanati/Miller Transplantation Institute, and the Charles Miller, MD Professor of Surgery, says the response to the opening of the Long Island office has been overwhelmingly positive and many patients are booking appointments there, a reflection of the reputation and track record of the transplant program at Mount Sinai.

“When considering a highly delicate and technical operation like a liver or kidney transplant, experience matters,” Dr. Florman says. The Institute, one of the largest and most comprehensive adult and pediatric abdominal transplantation centers in the world, has performed nearly 9,000 transplants and marked the 50th anniversary of its first kidney transplant this year. Having performed more than 4,000 liver transplants—many more than other Manhattan programs—Mount Sinai’s team is among the most experienced.

The new Long Island office is located within a large Mount Sinai Doctors practice, which also houses primary care physicians and specialists, and features expanded hours.
paired with intraoperative CT scanning and MRI-guided navigation, to precisely locate the blood clot within the brain. Through a tiny hole in the skull, a sheath containing a camera and an experimental suction device, known as the Apollo™ System, is navigated to the clot. The physicians then aspirate the clot with the Apollo device, normalizing the brain pressure.

In 2016, Dr. Mocco was named co-principal investigator of a Phase I clinical trial that will enroll approximately 50 patients at 10 sites across the United States to test the feasibility, safety, and efficacy of this procedure when compared to previously published standards. The trial, called the INVEST trial, is funded by Penumbra, Inc., the company that developed the Apollo System, and is scheduled to commence in May.

“We have just completed a six-month follow-up for the first 28 patients treated with this device, and although the data are preliminary, it appears that patients overall are doing very well with this procedure,” says Dr. Mocco.

One recent patient—an extremely active 86-year-old classical pianist—presented to Mount Sinai Beth Israel in February. “He came in with left arm and leg paralysis, slurred speech, and lethargy,” says Dr. Kellner. A CT scan revealed a very large 85 cc hemorrhage, and he was transferred to the Intracerebral Hemorrhage center at Mount Sinai West. Given his age, and the size and the location of the hemorrhage, he scored a ‘4’ on the ICH Score, which predicts a 97 percent chance of mortality within 30 days. The physicians removed the clot within 24 hours of the hemorrhage. “He has made a remarkable recovery,” says Dr. Kellner. “He was discharged to the rehabilitation unit at The Mount Sinai Hospital after only 10 days. Currently, he is cognitively almost back to normal, can walk with a walker, and is back to playing the piano.”

Dr. Mocco has received research grants from Penumbra, Stryker, Microvention, Medtronic, and Codman.

Developing New Technique to Treat the Most Devastating Form of Stroke (continued from page 1)

Graduate Students Host Events During National Public Health Week

Special lectures and wellness events sponsored by the Icahn School of Medicine at Mount Sinai’s Graduate Program in Public Health were held throughout the Health System during the first week of April, in recognition of National Public Health Week.

Valentin Fuster, MD, PhD, Director of Mount Sinai Heart and Physician-in-Chief of The Mount Sinai Hospital, commenced the week with a discussion about novel approaches to cardiovascular health. Other events included a lecture on increasing Master of Public Health (MPH) student engagement with the international health community, led by Nata Menabde, PhD, Executive Director, World Health
Valentin Fuster, MD, PhD, Director of Mount Sinai Heart and Physician-in-Chief of The Mount Sinai Hospital, was awarded the 2017 Lifetime Achievement Award by the American College of Cardiology (ACC) in honor of his decades of leadership in service, teaching, and research.

“Dr. Fuster’s invaluable contributions to the field of cardiovascular medicine show unparalleled dedication to excellence and boundless commitment to improving patient care,” said ACC President Richard Chazal, MD, who presented the award at the ACC’s 66th Annual Scientific Session in Washington, D.C., on Sunday, March 19.

Dr. Fuster is a world-renowned cardiologist whose mission is to curtail the global threat of cardiovascular disease through early education. He has authored more than 900 scientific articles and has received honorary doctorates from 33 universities. Dr. Fuster, the Editor-in-Chief of the Journal of the American College of Cardiology, has served as President of the American Heart Association, and he is primary adviser to the U.S. President on the upcoming document, “Global Health and the Future Role of the United States.”

Mount Sinai became the first institution to win three top ACC awards in the same year, as two other leading physicians were honored: Roxana Mehran, MD, Professor of Medicine (Cardiology), and Population Health Science and Policy, and Director of Interventional Cardiovascular Research and Clinical Trials; and George D. Dangas, MD, PhD, Professor of Medicine (Cardiology), Professor of Surgery (Vascular), and Director of Cardiovascular Innovation.

Dr. Mehran received the 2017 Bernadine Healy Leadership in Women’s CV Disease Award, presented to a Fellow of the ACC who has demonstrated leadership and accomplishment in research, teaching, practice, or service. Dr. Mehran is internationally recognized for her work as a clinical trial specialist with complex data analyses and for her experience in working with regulatory agencies to conduct trials. Dr. Mehran is also the Chair of the ACC’s Interventional Scientific Council.

Dr. Dangas received the 2017 Distinguished Teacher Award, presented to a Fellow of the ACC who has demonstrated innovative, outstanding teaching methods and has made major contributions in cardiovascular medicine at the national or international level. An authority in nonsurgical cardiac and vascular interventions, Dr. Dangas was a founding Chair of the ACC’s Interventional Scientific Council, and served on the ACC Board of Trustees until 2016.

Organization Office at the United Nations, as well as a screening of Before the Flood, a documentary about climate change. Shirley Gatenio Gabel, PhD, MPH, Professor, Fordham University Graduate School of Social Service, led a conversation on social justice and “intersectional” womanhood, which examines the relationship between interconnected social identities and discrimination.

Mount Sinai’s MPH students ended the week with a Day of Service, when nine of them served meals to the homeless at New York City Rescue Mission, the nation’s oldest shelter.

“As public health students, we are committing to professionally assisting communities as a whole through advocacy, policy, health care management, and research,” says Heather Omdal, a second-year MPH student and event organizer. “This opportunity allowed us to engage our academic interests with face-to-face interaction. It was a great union of including the issues that matter to us and engaging with the community on a personal level.”
The Mount Sinai Health System recently began sharing its expertise in digestive health services with Jupiter Medical Center in South Florida, in a partnership that will expand the quality of gastrointestinal (GI) care for adults and children in the region. Mount Sinai’s Dr. Henry D. Janowitz Division of Gastroenterology, one of the oldest and most distinguished GI programs, is ranked seventh in the nation by U.S. News & World Report. In addition to providing therapeutic GI services, the new partnership with Jupiter Medical Center will include noninvasive diagnostics, research, education, and preventive health and wellness services, with a primary focus on irritable bowel disease and hepatobiliary disorders.

Recently, donors and physicians, in photo, left, were among those attending a ribbon-cutting event at the Jupiter Medical Center’s newly renovated Frenchman’s Creek Digestive Health Center, a state-of-the-art facility made possible by the philanthropic support of the Frenchman’s Creek Men’s Health Day Golf Tournament.

A record number of participants received free oral, head and neck cancer screenings at The Mount Sinai Hospital (MSH) and Mount Sinai Beth Israel (MSBI) during Oral Cancer Awareness Month in April. The screenings, held on two consecutive days, were sponsored by Mount Sinai’s Department of Otolaryngology-Head and Neck Surgery and supported by the Head and Neck Cancer Alliance, for which Mount Sinai serves as the New York Chapter. Physicians and staff screened a total of 325 participants at both hospitals—245 at MSH and 78 at MSBI—and recommended 50 for follow-up care.

Head and neck cancers usually begin in the squamous cells that line the moist, mucosal surfaces inside the mouth, nose, and throat. Cancers also begin in the salivary glands, but less frequently. The National Cancer Institute estimates that 65,000 people in the United States will be diagnosed with head and neck cancers in 2017. There is an 80 percent survival rate when these cancers are detected early.

More than 50 students and faculty members at the Icahn School of Medicine at Mount Sinai shared a festive meal and built valuable connections recently at the second annual Sinai Women of Color in Medicine and Science dinner. The mentoring event, sponsored by Students for Equal Opportunity in Medicine, the Patricia S. Levinson Center for Multicultural and Community Affairs, and the Office for Diversity and Inclusion, was held on Thursday, March 16, at Red Rooster Harlem. “We look forward to continuing this event as an annual tradition at Mount Sinai. We expect it to grow in size as we work to recruit and retain women of color faculty and students,” says Ann-Gel S. Palermo, DrPH, MPH, Chief Program Officer, Office for Diversity and Inclusion, Associate Dean for Diversity and Inclusion in Biomedical Education, and Associate Director, Center for Multicultural and Community Affairs.

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**Lace Up!**

### Brain Imaging Center 10k

The Icahn School of Medicine at Mount Sinai’s Brain Imaging Center invites runners, walkers, and bikers to participate in this second annual run/walk/bike through Central Park.

**Friday, May 5**
5 pm
102nd Street at Central Park
Register at: bic.mssm.edu/bic-annual-10k-event/

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**Free SKIN CANCER SCREENINGS**

The Department of Dermatology is providing free skin cancer screenings at the following locations.

No appointment needed.

**Mount Sinai Skin and Laser Center**
234 East 85th Street, Fifth Floor
Thursday, May 4
3 – 6 pm

**Mount Sinai St. Luke’s**
1090 Amsterdam Avenue, Suite 11D
Thursday, May 11
5 – 7:30 pm

**Mount Sinai Downtown-Union Square**
10 Union Square East, Suite 3C
Wednesday, May 17
5 – 7 pm

**Mount Sinai West**
425 West 59th Street, Suite 8B
Thursday, May 25
5 – 7:30 pm

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**Walk to Defeat ALS®**

Join the Mount Sinai Beth Israel Walk Team participating in the 2017 New York City Walk to defeat ALS and help support individuals and their families living with amyotrophic lateral sclerosis (ALS). Distance: 1 mile.

**Saturday, May 6**
Check-in: 9 am
Starting time: 11 am
Hudson River Park, Pier 45
Sign up or make a donation at:
http://webgny.alsa.org/goto/
MountSinaiBethIsraelWalkTeam2017

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**Mount Sinai Transformation update**

For the most recent updates on Mount Sinai’s downtown transformation, please go to:
http://www.mountsinaihealth.org/locations/downtown

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**‘Let’s Talk Pediatrics’ Specialty Panel**

Local pediatricians and parents are invited to an open forum and networking evening hosted by Mount Sinai Doctors, 300 Cadman Plaza West. The panel features an adolescent medicine specialist, allergist, pediatric orthopedist, and a pediatric gastroenterologist who see pediatric patients in Brooklyn Heights. They will share expert advice, answer medical questions, and meet attendees.

**Wednesday, May 3**
6 - 7:30 pm
300 Cadman Plaza West
Brooklyn, NY 11201

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**Inside Mount Sinai**

Carrie Gottlieb, Executive Editor
Marilyn Balamaci, Executive Editor
Vanessa Gordon, Editor
Leslie Kirschenbaum, Design

**Visits inside on the Web**

www.mountsinai.org/inside

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