



**Mount
Sinai**

inside

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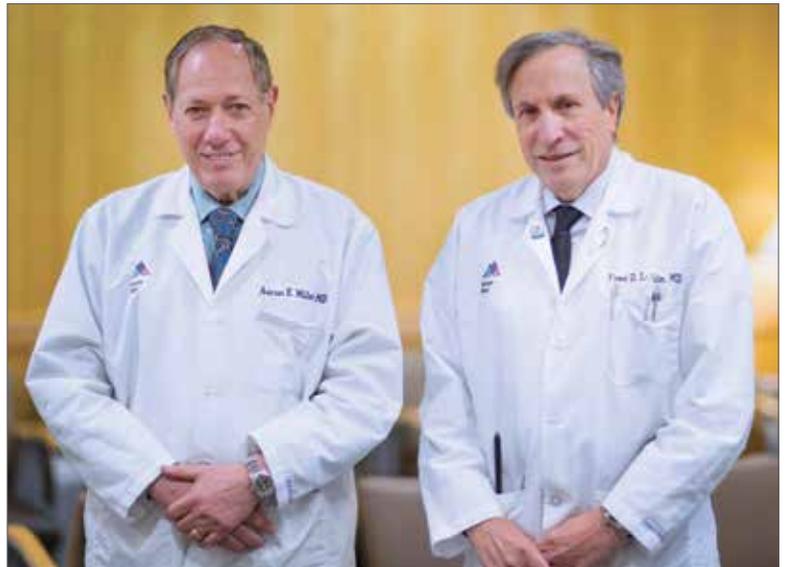
JANUARY 9 - 22, 2017

Two Researchers at Mount Sinai Have Key Roles In Breakthrough Therapy for Multiple Sclerosis

Three multicenter Phase III trials in which Mount Sinai researchers played key roles have reported highly encouraging results for the investigational drug ocrelizumab in treating both primary progressive multiple sclerosis (MS), the most disabling form of the disease, as well as relapsing MS, the most prevalent form. Two of the three trials, known as OPERA I and OPERA II, were focused on relapsing MS. The third trial, ORATORIO, was aimed at primary progressive MS. The findings were published online Wednesday, December 21, 2016, in *The New England Journal of Medicine (NEJM)*.

“The results for ORATORIO were truly groundbreaking because we never before had a treatment that was proven to work with primary progressive MS,” says Aaron E. Miller, MD, Professor of Neurology at the Icahn School of Medicine at Mount Sinai and Medical Director of the Corinne Goldsmith Dickinson Center for Multiple Sclerosis at Mount Sinai. “In the case of relapsing MS, we have had many options in the past, but this new treatment has extremely good efficacy and will probably be widely used for patients with the disease.”

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Aaron E. Miller, MD, left, and Fred D. Lublin, MD, helped lead groundbreaking multiple sclerosis research.

A Landmark Study Examines How Childhood Experiences Affect Adolescent Brain Development



Approximately 10,000 children between the ages of 9 and 10 will be recruited for the National Institutes of Health study.

The Icahn School of Medicine at Mount Sinai will receive \$4.7 million from the National Institutes of Health (NIH) to participate in a landmark study with 20 other research centers that will examine how childhood experiences and habits affect brain development and, ultimately, social, behavioral, academic, and health outcomes.

The NIH initiative, known as the Adolescent Brain Cognitive Development (ABCD) study, will follow approximately 10,000 children for 10 years, beginning at ages 9 and 10, through adolescence, and into early adulthood. Researchers will use advanced brain imaging, interviews, and behavioral testing to determine how video games, school sports, sleep habits, social media, smoking, alcohol, and drug use interact with each other and with a child's

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Mount Sinai Physician Restores a Patient's Voice

In August 2015, Anna Balint fell in her New Jersey home and sustained a neck fracture. Then, during reparative surgery at a local hospital, the anesthesiologist damaged Mrs. Balint's voice box, which left her near death.

"I turned blue from lack of oxygen," she says, reflecting on her ordeal. Fortunately, another physician in the room was able to perform an emergency tracheostomy and saved her life. In rescuing Mrs. Balint, however, the physician damaged her larynx and left her unable to speak.

An ear, nose and throat specialist, whom she later consulted in New Jersey, told Mrs. Balint that he would not be able to restore her voice—confirming her worst fears. But he did provide a silver lining: he recommended that she see Mark S. Courey, MD, Division Chief of Laryngology and Director of the Grabscheid Voice and Swallowing Center of Mount Sinai. That set her on the path to healing.

Dr. Courey scoped Mrs. Balint's throat and found complicated damage to the airway. He said he could bring her voice back with additional surgery to her larynx and trachea, although he could not guarantee that she would regain her pre-injury tone. To Mrs. Balint, who had once prided herself



Anna Balint and Mark S. Courey, MD, after her successful surgery

on having a lovely singing voice and enjoyed singing in church, that was a small price to pay, because at this point, the only way she could communicate was by writing her thoughts down on paper.

A six-hour operation to repair her voice box soon followed. During the surgery, Dr. Courey fixed a complex airway narrowing, performed a resection of Mrs. Balint's trachea, and created a new tracheotomy. Although she remained in the hospital for

five days following the surgery and was connected to a ventilator, Mrs. Balint noticed immediate results.

"As soon as I was out of surgery, I started to speak," she says. "I did not have to write down everything. I was so happy! Can you imagine how many months I had to go through writing everything down before my operation with Dr. Courey?"

At first, Mrs. Balint saw Dr. Courey every two to three weeks so he could check on the progression of her healing. The ventilator made sleeping at night particularly uncomfortable. But, approximately one year after her ordeal began, Dr. Courey removed her from the machine and Mrs. Balint says she finally felt "free. Dr. Courey held my hand and said, 'Everything is going to be all right.'"

Mrs. Balint says, "I still have a small hole in my neck. If I talk too much I have to assist my voice with my stomach, but I have no machine. Every day I think about Dr. Courey. Nobody else knew how to correct my voice, only he did. I would recommend him to everybody. In fact, I have already recommended two friends to see him. I am alive and can speak to my husband and grandchildren, I am very happy."

› Breakthrough Therapy for Multiple Sclerosis *(continued from page 1)*

MS is a complicated, often disabling, disease of the central nervous system that can produce a wide variety of neurological symptoms as it disrupts the flow of information within the brain and spinal cord, and between the brain and body. It afflicts an estimated 2.3 million people worldwide and 400,000 in the United States. Approximately 10 to 15 percent of this population is diagnosed with primary progressive MS, in which patients, instead of relapsing and recovering partly or fully, experience gradual deterioration from disease onset.

According to Dr. Miller, who served as principal investigator at Mount Sinai for ORATORIO, ocrelizumab significantly reduced the progression of clinical disability of primary progressive MS at both 12 and 24 weeks—a finding that prompted the *NEJM* to hail the trial in an editorial as a "landmark study in the field."

Fred D. Lublin, MD, Saunders Family Professor of Neurology at the Icahn School of Medicine at Mount Sinai and Director of the Corinne Goldsmith Dickinson Center, was a member of the steering committee

that designed and monitored ORATORIO. Dr. Lublin was also an author for OPERA I and OPERA II, which found that ocrelizumab resulted in 46 to 47 percent lower relapse rates than interferon beta-1a, a current leading treatment for relapsing MS. Ocrelizumab, from Genentech, a member of the Roche Group, was created to treat both forms of the disease. A humanized monoclonal antibody, ocrelizumab binds to CD-20 proteins on the surface of certain B cells, causing their depletion. B cells are believed to be a key contributor to attacks on the insulation and support around nerve fibers in the brain, spinal cord, and optic nerves that can lead to disability. Ocrelizumab is administered by intravenous infusion every six months.

"Every study brings us closer to a cure, and now we have opened the door to a whole new group: patients with primary progressive MS, whom we can more successfully treat," Dr. Lublin says. "The next challenge is to see if we can select patients most likely to respond to this therapy."

Fifth Annual Dubin Breast Center Fact vs. Fiction Luncheon and Symposium

Is a mastectomy preferable to a lumpectomy? Can breast implants cause cancer? These were among the questions asked by attendees at the Fifth Annual Dubin Breast Center Fact vs. Fiction Luncheon and Symposium held in 2016, an informative event that sets the record straight on the myths surrounding breast cancer.

A panel of physicians from the Dubin Breast Center of The Tisch Cancer Institute and other departments within the Mount Sinai Health System addressed more than 150 guests on issues concerning breast health and cancer diagnosis, treatment, and prevention.

With Perri Peltz, host of “Doctor Radio Reports,” a weekly public health program, serving as moderator, the Mount Sinai experts cleared up any doubts as to whether implants cause breast cancer—they do not—and explained that after consulting with their physicians, most women have a choice between a mastectomy and a lumpectomy. The physicians also discussed what happens when

patients find themselves in the challenging situation of becoming pregnant, after receiving a breast cancer diagnosis.

The panelists represented breast surgery, medical oncology, breast cancer clinical research, breast imaging, precision medicine and obstetrics, gynecology and reproductive health. They were: Elisa Port, MD, FACS, Co-Director, Dubin Breast Center, Chief of Breast Surgery; Michael Brodman, MD, Professor and Chairman, Ellen and Howard C. Katz Chairman’s Chair, Department of Obstetrics, Gynecology and Reproductive Science; Jeffrey Mechanick, MD, Clinical Professor of Medicine, Director of Metabolic Support, Division of Endocrinology, Diabetes and Bone Disease; Mark Sultan, MD, FACS, Co-Chief, Division of Plastic and Reconstructive Surgery, Associate Professor of Surgery; Laurie Margolies, MD, FACR, Chief, Breast Imaging; and Amy Tiersten, MD, Professor of Medicine (Hematology and Medical Oncology).

To view the event, go to <https://philanthropy.mountsinai.org/video>.

Cirque du Soleil Enchants Pediatric Patients At Kravis Children’s Hospital

Performers from Cirque du Soleil’s Kurios: Cabinet of Curiosities brought their imaginative art form to life during a recent visit to the Child Life Zone at Kravis Children’s Hospital at Mount Sinai. Pediatric patients and their families enjoyed a short performance that brought smiles to their faces. Recorded in the KidZone TV studio within the Child Life Zone, the performance was broadcast live throughout the hospital for those who were unable to attend in person.

“The artists of the Cirque du Soleil truly lifted the spirits of our hospitalized children and families during their dynamic visit,” says Diane Rode, Director, Child Life and Creative Arts Therapy Department, Kravis Children’s Hospital.

A short time later, festivities continued when the Mount Sinai Children’s Center Foundation hosted its 30th annual benefit at Randall’s Island Park. Supporters saw a full performance of Cirque du Soleil’s Kurios: Cabinet of Curiosities and recorded hopeful, positive messages that were broadcast to hospitalized patients and their families via the KidZone TV studio.

A major fundraising event for the Department of Pediatrics, the benefit supports Child Life and Creative Arts Therapy programming for the most seriously ill pediatric patients. The benefit was chaired by



Patients Kayla Bonilla and Michael Maxwell clowned around with Cirque du Soleil performers at the Child Life Zone.

Jennifer Deppe Parker, Stan Parker, Frederique Svider, and Raymond Svider, and honored Alfin G. Vicencio, MD, Chief of the Division of Pediatric Pulmonology in the Jack and Lucy Clark Department of Pediatrics at the Icahn School of Medicine at Mount Sinai.



Participants at the Fifth Annual Dubin Breast Center Fact vs. Fiction Luncheon and Symposium included, from left: Sally Wolf, patient speaker; panelists Elisa Port, MD, FACS; Michael Brodman, MD; Laurie Margolies, MD, FACR; Jeffrey Mechanick, MD; Amy Tiersten, MD; and Mark Sultan, MD, FACS; Eva Andersson-Dubin, MD, Founder of the Dubin Breast Center and a Mount Sinai Trustee; and moderator Perri Peltz.

› A Landmark Study Examines Childhood Experiences *(continued from page 1)*

changing biology to alter the development of the brain over the short and long terms.

Rita Goldstein, PhD, Professor of Psychiatry, and Neuroscience, and Chief of the Neuropsychology of Addiction and Related Conditions research group and the Brain Imaging Core at the Icahn School of Medicine, is Mount Sinai's principal investigator on the study. Dr. Goldstein and her team will collaborate with Yale University to recruit more than 1,000 children, an effort that will unfold over the next two years through partnerships with public and private schools.

The ABCD study is "a paradigm shift for the brain development study," says Dr. Goldstein. "Multimodal neuroimaging studies to uncover brain mechanisms that could change over time with development and shed light on health, resilience, and vulnerability factors have not been conducted at this scale before, making this project both exciting and crucially important."

An additional partnership with BJ Casey, PhD, the study's principal investigator at Yale, will enable Dr. Goldstein's team to study the cortical-subcortical pathways that underlie select behaviors crucial during the adolescent years.

"Such early identification of the dynamics of brain states, pathways, and mechanisms is crucial for enhancing the understanding of factors that may contribute to certain behaviors," says Dr. Goldstein. "We will also be able to identify the brain circuits and pathways that may predispose to or protect against certain risks. The identification of mechanisms underlying resilience has always been an important focus at Mount Sinai."

"Multimodal neuroimaging studies to uncover brain mechanisms that could change over time with development and shed light on health, resilience, and vulnerability factors have not been conducted at this scale before..."

— Rita Goldstein, PhD

Ultimately, the study is expected to provide parents, school principals and teachers, medical professionals, and public policymakers with useful data to promote the health, well-being, and success of children.

"We know the brain is still developing well into the mid-20s, making it vulnerable to a host of influences," said NIH Director Francis S. Collins, MD, PhD, in announcing the initiative. "With several NIH institutes and centers working together on this important study, we will be able to learn how a variety of biological events and environmental exposures affect brain development, giving us greater insight into what helps adolescents traverse that potentially tumultuous time to become healthy and productive adults."

Around the Health System

World Diabetes Day Health Fair



Susan Mirsky, center, with daughter Jennifer Mirsky, left, and Selassie Ogyaadu, MD, MPH, Clinical Research Coordinator, provided diabetes information at the health fair.

The Mount Sinai Hospital recently celebrated World Diabetes Day with a health fair in the Guggenheim Pavilion. A multidisciplinary team led by Camilla Levister, MS, ANP-C, CDE, from the Mount Sinai Diabetes Center, provided body-fat testing, type 2 diabetes risk assessment, and nutritional counseling. Several organizations were also on hand to promote healthy living, including the American Diabetes Association and the 92nd Street Y, which offered an exercise class for all fitness levels. Year-round, the Center's Stanley Mirsky, MD Diabetes Education Unit offers free diabetes education classes in Spanish and English and social support for those at risk for the disease, or living with it. "Every year, my family and I are thrilled to volunteer at World Diabetes Day and get the word out about the Unit," said Susan Mirsky, honorary Chair of the Unit, which is named for her late husband, a renowned Mount Sinai endocrinologist. "Diabetes is a uniquely self-controlled disease. We provide knowledge so that the patient—not diabetes—is in control."

Celebrating the Holidays in Harmony

Jon Batiste, the renowned jazz pianist, leader of the group Stay Human, and bandleader for *The Late Show with Stephen Colbert*, recently performed at the Louis Armstrong Center for Music and Medicine's holiday concert. In the Mount Sinai Downtown-Union Square atrium, Mr. Batiste took to the grand piano, serenading an audience of patients and staff with holiday favorites. Mr. Batiste also played the melodica in accompanying Singing Together Measure by Measure, a choir of recovering stroke patients and caregivers. Actively involved with the Center, Mr. Batiste received the What a Wonderful World Award in 2014 and serves on the Center's Steering Committee.



Jon Batiste entertained patients and staff on the grand piano and melodica.

Merriment at Mount Sinai's Winter Wonderland

Families with young children in Williamsburg and Inwood braved the frigid weather in December to take part in two Winter Wonderland events that were hosted by Mount Sinai Doctors practices in each neighborhood. Staff festively decorated the facilities with streamers

and cardboard cutouts of characters from the Disney film *Frozen*. Children created their own ice cream ornaments, built 3D igloos, made snowman picture frames, took photos with the cardboard cutouts, and played in makeshift igloos while listening to songs from the hit movie.



TIAA Financial Consultants At Mount Sinai

TIAA financial consultants are onsite at 19 East 98th Street every weekday to provide one-on-one advice sessions, at no additional cost, to participants enrolled in the Mount Sinai 403(b) Retirement Plan.

For more information, or to schedule an appointment, call 800-732-8353.

Grand Rounds / Anesthesiology

Feroze Mahmood, MD, FASE, Associate Professor, Anaesthesia, Harvard Medical School, Director, Perioperative Echocardiography, Beth Israel Deaconess Medical Center, presents “Perioperative Ultrasound Training: A Challenge and an Opportunity.”

Wednesday, January 11
6:30 – 8:10 am
Annenberg 13-01

Grand Rounds / Surgery

Steven M. Opal, MD, Professor, Medicine, Infectious Disease Division, The Alpert Medical School of Brown University, presents “Immune Adjuvants as a Treatment for Septic Shock.”

Wednesday, January 11
7:45 – 9 am
The Mount Sinai Hospital
Hatch Auditorium

Grand Rounds / Medicine

Thomas M. Moran, PhD, Director, Center for Therapeutic Antibody Development, presents “Monoclonal Antibodies as Therapeutics: Target Selection, Generation, and Effector Mechanisms.”

Tuesday, January 17
8:30 – 9:30 am
Mount Sinai Beth Israel
Podell Auditorium, Bernstein Pavilion

Grand Rounds / Center for Spirituality and Health

Maggie Keogh, MEd, Chaplain, The Mount Sinai Hospital, presents “Improving Employee Engagement Through Spiritual Care.”

Friday, January 20
11 am – Noon
Hess Center, Davis Auditorium

Mount Sinai Transformation **update**

For the most recent updates on Mount Sinai’s downtown transformation, please go to:

<http://www.mountsinaihealth.org/locations/downtown>

Epic Inpatient Validation Sessions

Beginning later this month, Mount Sinai St. Luke’s and Mount Sinai West staff will have an opportunity to see live demonstrations of Epic, a significant step as both hospitals move toward adopting the same medical record system currently in place at The Mount Sinai Hospital and Mount Sinai Queens. Project leaders and subject matter experts will offer numerous sessions that will depict common and integrated workflow scenarios over the course of two weeks. Clinical staff are encouraged to participate in this collaborative process and attend as many relevant sessions as possible to provide feedback. Stay tuned for a broadcast notification with a list of locations and times.

WEEK 1:

Monday, January 30 – Friday, February 3

WEEK 2:

Monday, February 6 – Friday, February 10

For more information about the validation sessions or the Epic Inpatient Project, please visit <http://intranet1.mountsinai.org/EpicSLWinpatient/home.asp> or email EpicSLWinPatient@mountsinai.org.

Mount Sinai Doctors Sponsors Photo Contest

To enter, post photos of New York City photography including a Mount Sinai Doctors logo and/or Mount Sinai Doctors practice with #msdnyc and a hashtag representing the neighborhood. Ten winners will be selected to each receive an American Express Gift Card valued at \$200 as compensation for photographic rights. The contest runs until Wednesday, March 1. The official rules will be posted at www.mountsinai.org/msdphotocontest.

Note: To comply with HIPAA regulations, photos cannot include patients.



INSIDE MOUNT SINAI

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