

# Mount Sinai inside



After receiving their white coats, members of Mount Sinai School of Medicine's Class of 2015 recite the Student Oath.

## White Coat Ceremony: A Journey Begins

The 143 members of Mount Sinai School of Medicine's Class of 2015 officially received their white coats on Monday, September 12, during the 14th Annual White Coat Ceremony, a tradition that symbolizes the start of their journey as medical professionals.

Kenneth L. Davis, MD, President and Chief Executive Officer of The Mount Sinai Medical Center, addressed a capacity audience at Stern Auditorium that included faculty, administrators, students, and their family members and friends. "As you put on your white coats, you will anticipate the courses, the labs, the clinical rotations, and the community service you will complete," he said. "But what you cannot imagine is the sense of family that is an essential part of the Mount Sinai culture."

Dr. Davis added: "You have already met the toughest prerequisite for entrance into the Mount Sinai family, acceptance into medical school, but there are others. You must be passionate about helping our patients and advancing our science, ingenious in the solutions we seek, empathetic toward all who enter our doors, and do all of this not as individuals but as a team."

CONTINUED ON PAGE 2

## Look inside

A Culture of Excellence  
and Philanthropy

Dubin Breast Center  
Patients Share Stories

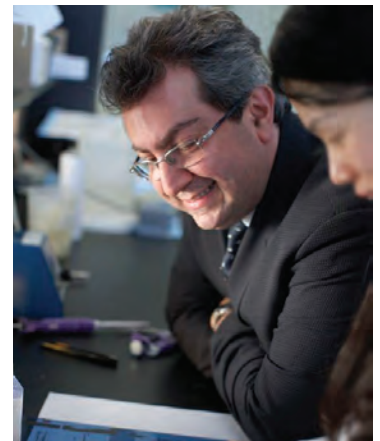
New Prosthesis Improves  
Quality of Life

Mount Sinai  
Diabetes Center

## Targeting Heart Failure

Roger J. Hajjar, MD, Director of the Wiener Family Cardiovascular Research Laboratories at The Mount Sinai Medical Center, and his team of researchers have identified a new drug target that may treat or prevent heart failure. The researchers found that decreased levels of the protein, SUMO1, were present in models of failing human and pig hearts. When the investigators injected SUMO1 into the heart models using gene therapy, cardiac function was greatly improved.

SUMO1 regulates key transporter genes, particularly SERCA2a, which has been studied extensively by Dr. Hajjar, the Arthur and Janet C. Ross Professor of Medicine at Mount Sinai School of Medicine, and his team as part of the Calcium Upregulation by Percutaneous Administration of Gene Therapy in Cardiac Disease



Roger J. Hajjar, MD

CONTINUED ON PAGE 2

## Targeting Heart Failure (continued from page 1)

(CUPID) trial. The team discovered that injections of SERCA2a restore cardiac function, but over time, the new SERCA2a will become dysfunctional.

That understanding led researchers to determine that increasing the presence of SUMO1 not only improved the stability and enzyme activity of SERCA2a, but also protected it from the oxidative stresses and dysfunction so prevalent in heart disease.

“Our experiments over the last four years beginning with the discovery of SUMO1 as an interacting protein of SERCA2a have shown that it plays a critical role in the development of heart failure,” says Dr. Hajjar. “In fact, SUMO1 may be a therapeutic target at the earliest signs of development and may be beneficial in preventing its progression, a much-needed advance for the millions suffering from this disease.”

Dr. Hajjar’s team has developed a cellular test to screen for compounds that may increase the interaction of SERCA2a with SUMO1, evaluating SUMO1 as an adjunctive therapy to SERCA2a.

An estimated 5.8 million Americans have heart failure, and 670,000 new cases are diagnosed each year, according to the U.S. Centers for Disease Control and Prevention. Heart failure is often treated with aggressive medical and device therapy.

Says Valentin Fuster, MD, PhD, Director of Mount Sinai Heart, the Zena and Michael A. Wiener Cardiovascular Institute, and the Marie-Josée and Henry R. Kravis Center for Cardiovascular Health at The Mount Sinai Medical Center, “Dr. Hajjar and his team are fundamentally changing how we think about and treat heart failure. Their work exemplifies Mount Sinai’s commitment to generating breakthroughs in cardiovascular research.”

*The CUPID trial is funded by Celladon Corporation, which was co-founded by Dr. Hajjar, who has an equity interest and participates in an advisory board. SUMO1 is under patent as a therapeutic target by Mount Sinai.*

---

## White Coat Ceremony (continued from page 1)

Dennis S. Charney, MD, the Anne and Joel Ehrenkranz Dean, Mount Sinai School of Medicine and Executive Vice President for Academic Affairs, The Mount Sinai Medical Center, challenged the Class of 2015 saying, “Embrace the unknown, and dare to be innovative.”

He continued: “We are at a watershed moment in science and medicine—there is still so much to be discovered. We, your teachers, want you to stand on our shoulders, so that your vision can change the future of medicine for the better.”

Each student received a white coat and stethoscope presented by The Mount Sinai Alumni, and recited the Student Oath. The students pledged a commitment to becoming a “trust-worthy physician who will practice medicine with excellence, integrity, and devotion to my patients.” Faculty recited the Faculty Pledge “to maintain the highest professional standards,” as teachers and mentors.

Peter W. May, Chairman, the Boards of Trustees, The Mount Sinai Medical Center,

told the audience, “Mount Sinai will guide you on this exciting journey every step of the way. You will be taught and mentored by world-renowned faculty. You will be trained to become a physician, a researcher, and an advocate.”

Raja Flores, MD, the Steven and Ann Ames Professor of Thoracic Surgery, and Chief of the Division of Thoracic Surgery, was the keynote speaker. “What I have found after 25 years of practice is that to operate on the human body is pretty straightforward, but to nurture the mind and spirit in the face of disease is a lot more complex,” he said. “As a physician, you will have more experience in human suffering than any lay person. Your patients and their families will look to you in their darkest hour. It is up to you to put their disease in context with their lives. This means getting to know your patients well.”

Dr. Flores continued, “You may ask, ‘How will I know what patients want?’ Listen, and they will tell you. Also, hold their hand, hug them, sit on their bed, and cry with them. This is the challenge that the person wearing the white coat must meet.”

## A Culture of Excellence and Philanthropy

During the 14th Annual White Coat Ceremony, Kenneth L. Davis, MD, President and Chief Executive Officer of The Mount Sinai Medical Center, asked students to continue the culture of excellence and philanthropy set by two distinguished members of the Mount Sinai family who passed away this year—Alvin Teirstein, MD, a renowned pulmonologist, and Edgar M. Cullman, a member of the Boards of Trustees for more than 50 years.

Dr. Teirstein was the Florette and Ernst Rosenfeld and Joseph Solomon Professor of Medicine, and former Chief of the Division of Pulmonary, Critical Care, and Sleep Medicine. “Dr. Teirstein’s research into sarcoidosis shaped that field, and he was a cherished physician whose career embodies the Mount Sinai-family commitment to knowledge, training, and patients,” said Dr. Davis.

“When Mr. Cullman joined the Boards of Trustees, he was following in the footsteps of his great grandfather, grandfather, and father,” Dr. Davis said. “For his entire life, Edgar Cullman remained a strong and passionate advocate for nursing, patient care, and Mount Sinai.”

LEFT PHOTO: Raja Flores, MD, delivered the keynote address. CENTER PHOTO, FROM LEFT: Medical students Susanna O’Kula, Caroline Offit, and Katelyn O’Connor RIGHT PHOTO, FROM LEFT: Alex Federman, MD, MPH, Chief, Division of General Internal Medicine, congratulated medical student Andrew Kibert.



# Dubin Breast Center Patients Share Their Experiences

Since opening its doors last spring, the Dubin Breast Center of The Tisch Cancer Institute has provided comprehensive, patient-centered care in a state-of-the-art facility to those who seek treatment at a vulnerable time in their lives.

The center's high level of multidisciplinary care, provided by specialists working in close proximity to each other, improves the patient's experience, and ultimately the

clinical outcome, according to Dubin Breast Center's Co-directors, George Raptis, MD, MBA, and Elisa Port, MD, Chief of Breast Surgery.

Against this backdrop, researchers at The Mount Sinai Medical Center are working to develop more targeted treatments for breast cancer by integrating current standard treatments with evolving biologic therapies.

In 2011, roughly 230,480 new cases of invasive breast cancer have been diagnosed in the United States, according to the American Cancer Society, which estimates that one in eight women will have the disease at some time during her life. In honor of National Breast Cancer Awareness Month, two women who received treatment at the Dubin Breast Center shared their life-changing experiences.



## Imelda Conste

*"The best advice I can offer women is to have regular mammograms."*

"I eat well, work out, and run marathons. I like being in control of my body and my future, but learning I had breast cancer shattered my robust self-image and helped me appreciate the value of regular health screenings

and a strong support system during trying times.

The best advice I can offer women is to have regular mammograms, and if they need treatment to have it at the Dubin Breast Center. I love the way it is set up, with all the services in one central location. Its calming atmosphere promotes healing, and in addition to being at the top of their profession, the doctors treat patients with a great deal of care and compassion."



## Birgitta Filippelli

*"I can't stress enough how comforting it is to be in good, highly capable hands."*

"I discovered I had breast cancer through a routine mammogram. I didn't feel sick; I didn't notice lumps in my breasts; the news hit me out of the blue. My tumor was so large I had to have chemotherapy to shrink it before I could have surgery.

But I can't stress enough how comforting it is to be in good, highly capable hands during a frightening time. Knowing that my entire care team, from physicians to nurses, to other staff, placed me in a warm and powerful circle of care strengthened me, and being asked to serve on the Dubin Breast Center's Advisory Committee empowered me and gave me something positive upon which to focus."

---

## New Prosthesis Improves Quality of Life

James C. Wittig, MD, Chief of Orthopaedic Oncology and Associate Professor of Orthopaedic Surgery at The Mount Sinai Medical Center, has become one of the first surgeons in the United States to implant an expandable metallic endoprosthesis to replace a leg bone.

The device, which expands by responding to an external magnet, recently received U.S. Food and Drug Administration approval to be used in young patients whose limbs require lengthening as they grow. In September, Dr. Wittig operated on 8-year-old Avrum Rosenberg of Brooklyn, removing a portion of his thigh bone—compromised by a rare sarcoma—and replacing it with the new endoprosthesis, a Stanmore Juvenile Tumor System Non-Invasive Extendible Distal Femoral Replacement (JTS Implant). As Avrum grows, Dr. Wittig will use a special magnet to extend the JTS Implant approximately 4 millimeters during 16-minute office procedures. Avrum, like most boys, is expected to grow steadily through the age of 15, and will have to undergo at least three procedures a year for the next six years.

Prior to using the new endoprosthesis, Dr. Wittig says surgeons lengthened a patient's artificial limb by puncturing the skin, drilling down to the prosthesis, unlocking it with a wrench, and lengthening it with a screwdriver. This laborious, operating-room procedure subjected patients to potential infections, and required an overnight stay in the hospital.

"The (JTS) device is a very durable prosthesis," says Dr. Wittig. "The fact that it expands under a magnet makes the treatment non-invasive. The biggest advantage is that you don't have to

bring the child back to the operating room where they can risk infection, pain, and trauma."

Avrum's father, Meyer Rosenberg, agrees. "It's a tragedy that a child has to go through surgery once. I didn't want him to have to go through it again and again," he says.



LEFT TO RIGHT: Meyer Rosenberg stands by his son's bedside as James C. Wittig, MD, examines Avrum's leg following surgery.

## Events

### Third Annual Patient Education Symposium

Aaron Miller, MD, Medical Director of the Corinne Goldsmith Dickinson Center for MS (CGD Center); Fred Lublin, MD, Director, CGD Center; other CGD faculty; and Timothy Coetzee, PhD, Chief Research Officer, National MS Society, will present "Changing the Future: New Trends in Multiple Sclerosis Research and Treatment." Registration is required. Call 212-463-7787, option 1.

Sunday, October 16  
9 am - 3:30 pm  
Grand Hyatt New York Hotel  
42nd Street and Park Avenue

### Grand Rounds Diabetes

Aaron Vinik, MD, PhD, Professor of Internal Medicine, Pathology, and Neurobiology, Eastern Virginia Medical School Strelitz Center and Neuroendocrine Unit, presents "Autonomic Imbalance: Prophet of Doom or Hope."

Thursday, October 6  
8:30 - 9:30 am  
Atran Building  
Fourth Floor, Room AB4-11

### Grand Rounds Geriatrics and Palliative Medicine

Daniel Rosen, PhD, MSW, Associate Professor, School of Social Work, University of Pittsburgh, presents "Just Say Know: Addressing Substance Use Disorders Among Older Adults."

Thursday, October 6  
5 - 6 pm  
Annenberg 10-30

### Grand Rounds Oncological Sciences

Hans-Guido Wendel, MD, Assistant Member, Sloan-Kettering Cancer Center, Cancer Biology and Genetics Department, presents "Genetic Studies in Leukemia and Lymphoma."

Tuesday, October 4  
Noon  
Icahn Medical Institute  
First Floor  
Seminar Room

### Grand Rounds Endocrinology

Robert Yanagisawa, MD, Associate Professor of Medicine (Endocrinology, Diabetes and Bone Disease), presents "A Mount Sinai Global Health Initiative in Japan: Building a New Mental Health Program in Fukushima."

Thursday, October 13  
4:30 - 5:30 pm  
Atran Building  
Fourth Floor, Room AB4-11

## Education

### The Page and William Black Post Graduate School for Continuing Education

The Office of Continuing Medical Education (CME) offers seminars, conferences, grand rounds, and live webcasts for physicians and other health professionals to extend their knowledge and remain current in their specific fields. For more information on courses, visit <http://www.mssm.edu/education/continuing-medical-education/> courses or call the Office of CME at 212-731-7950.

### 403(b) Education Seminar

The Human Resources Department is sponsoring a seminar, "Staying on Track in a Volatile Market," which will offer help in understanding stock market volatility. Representatives from TIAA/CREF, Prudential, and Vanguard will be available to answer questions.

Wednesday, October 12  
12:30 - 1:30 pm  
Goldwurm Auditorium

## Mount Sinai Diabetes Center Offers Exercise Program

The Mount Sinai Diabetes Center is offering a free, dance-inspired, light-exercise program known as Viva for individuals at risk for diabetes. For now, Viva is open to those who have pre-diabetes or diabetes risk factors. In the future, the program may be available to patients who have diabetes. Multiple classes will be offered each week in English and Spanish. The program, which starts this month, is sponsored by the Mount Sinai Auxiliary Board.

# viva

To register, email [viva@mountsinai.org](mailto:viva@mountsinai.org) or call 212-824-VIVA. Individuals interested in participating will be asked to have their health care provider complete a form to

clear them for light exercise. To learn more, contact Brett Ives at [brett.ives@mountsinai.org](mailto:brett.ives@mountsinai.org).



### Inside Mount Sinai

2011 Marketing & Communications  
Carrie Gottlieb, Editor  
Marilyn Balamaci, Editor

### Submissions

Box 1475  
[inside@mssm.edu](mailto:inside@mssm.edu)

### Visit Inside on the Web

[www.mountsinai.org/inside](http://www.mountsinai.org/inside)



To find out what's happening right now, follow Mount Sinai on Twitter @MountSinaiNYC



Visit us on Facebook  
[facebook.com/mountsinainyc](https://www.facebook.com/mountsinainyc)