



**Mount  
Sinai**

# inside

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## Cardiac Catheterization Lab Sets Record for Excellence

For the 17th consecutive year, The Mount Sinai Hospital's Cardiac Catheterization Laboratory or its interventionists have received the highest two-star safety rating from the New York State Department of Health (NYSDOH) for percutaneous coronary interventions (PCI), also known as angioplasty. PCI—one of the most common procedures for patients with coronary artery disease—opens blocked arteries and restores normal blood flow to the heart.

Mount Sinai's exceptional ratings appeared in NYSDOH's recently released report on the risk factors associated with PCI at 60 hospitals across New York State from December 1, 2009, through November 30, 2012. The NYSDOH report is designed to help patients make better decisions about their care based upon a statistical review of each hospital's data.

Notably, The Mount Sinai Hospital accomplished a state record in 2012, as the only hospital ever to receive two-star safety ratings in two categories in a single year for significantly lower mortality

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Samin K. Sharma, MD, Director of Clinical and Interventional Cardiology, The Mount Sinai Hospital; and Annapoorna Kini, MD, Director of the Cardiac Catheterization Laboratory at The Mount Sinai Hospital

## Using 3D Print Technology to Restore a Child's Nose

For the first time in the United States, a patient has undergone a complex and intricate series of surgical procedures to implant a fully functional, three-dimensional (3D) printed "model" of a human nose. New York Eye and Ear Infirmary of Mount Sinai surgeons Tal Dagan, MD, Associate Adjunct Surgeon, and Grigoriy Mashkevich, MD, Assistant Professor of Otolaryngology, Division of Facial Plastic and Reconstructive Surgery, performed the operations on Dallan Jennet, a 14-year-old boy from the Marshall Islands. Dallan's face was disfigured at the age of 9 after he fell onto a live power line, severely burning his entire face and losing his nose.

"The procedure is akin to a 'nose transplant' in that we were able to replace the nose with a functional implant," says lead physician



Tal Dagan, MD, hugs his patient, Dallan Jennet.

Dr. Dagan. "This procedure may be a breakthrough in facial reconstruction because the patient will never have to deal with the standard issues of transplantation, such as tissue rejection or a lifetime of immunosuppressive therapies."

Dallan flew halfway around the world to New York City for the opportunity to live a normal life with the help of Canvasback Missions, Inc., a nonprofit organization that brings health care and health education to the Pacific Islands. Treatment began in early 2015 in the Marshall Islands, where the patient underwent the first of five surgeries. Expanders were inserted under the remaining skin of his nose, creating space under his skin for the actual reconstruction, which would be performed at New York Eye and Ear Infirmary.

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# Researchers Honored at First Mount Sinai Innovations Awards Ceremony

Sixteen physicians, scientists, and students were honored for their creativity and biomedical discoveries at the first annual Mount Sinai Innovations Awards Ceremony, held on the Icahn School of Medicine at Mount Sinai campus.

“We are building a culture that encourages and supports innovation in medicine, and there is no better way to show how much we value this and spur more innovation than formally recognizing investigators for their outstanding work,” said Scott Friedman, MD, who opened the Awards Ceremony on Monday, October 26. “This culture will benefit our patients and the Mount Sinai Health System.”

Dr. Friedman is Dean for Therapeutic Discovery, Fishberg Professor of Medicine, Professor of Pharmacology and Systems Therapeutics, and Chief, Division of Liver Diseases, Icahn School of Medicine at Mount Sinai.

Mount Sinai Innovation Partners, which facilitates the application and commercialization of discoveries made throughout the Mount Sinai Health System and develops research partnerships,

sponsored the inaugural Awards Ceremony. Co-sponsors included legal firm Jones Day, and the Icahn School of Medicine’s Office of Academic Development and Enrichment.

“In particular, we want to attract interest and recognize trainees, students, postdoctoral fellows, medical students, graduate students—anyone who’s learning and potentially will benefit a culture of innovation and discovery,” said Dr. Friedman.

The event kicked off the fourth annual *SinaInnovations* conference, which began on campus the following morning, spanning two days and featuring national experts in technology and clinical care who spoke about the future of digital medicine.

The new Innovations Awards were presented by Dr. Friedman; Lakshmi Devi, PhD, Dean for Academic Development and Enrichment; Basil Hanss, PhD, Interim Dean, Graduate School of Biomedical Sciences, Associate Professor, Medicine (Nephrology), Medical Education, and Structural and Chemical Biology; and Erik Lium, PhD, Vice President and Executive Director, Mount Sinai Innovation Partners.



Presenters and recipients of the Mount Sinai Innovations Awards gathered at the ceremony to celebrate scientific achievements made at Mount Sinai.

## INVENTOR OF THE YEAR AWARD

**Peter Palese, PhD**, Professor and Chair, Microbiology

**Adolfo García-Sastre, PhD**, Professor, Microbiology, Fishberg Professor, Medicine (Infectious Diseases), Director, Global Health and Emerging Pathogens Institute

## FACULTY IDEA PRIZE

**Manish Arora, PhD, MPH**, Associate Professor, Preventive Medicine, Director, Division of Environmental Health

**Hirofumi Morishita, MD, PhD**, Assistant Professor, Psychiatry, Neuroscience, and Ophthalmology

## 4D TECHNOLOGY DEVELOPMENT PROGRAM AWARD

**Jeffrey Newcorn, MD**, Associate Professor, Psychiatry, and Pediatrics, Director, Division of ADHD and Learning Disorders

**Juan Pedraza, MD**, Assistant Professor, Psychiatry, Director, ADHD Track Clinic

## QUOD ERAT DEMONSTRANDUM (Q.E.D.) AWARD

**Susana Bardina**, PhD candidate

**Thomas Gardner**, PhD candidate

**Kathryn Harper**, PhD candidate

**Priya Luthra**, PhD

**Bridget Matikainen-Ankney**, PhD candidate

## QUOD ERAT DEMONSTRANDUM (Q.E.D.) SPECIAL RECOGNITION AWARD

**Gabriella Casalena, PhD**, former Postdoctoral Fellow

**Ilse Daehn, PhD**, Assistant Professor, Medicine (Nephrology), The Charles Bronfman Institute for Personalized Medicine

**Nicole C. McKnight, PhD**, former Postdoctoral Fellow, Neurology

**Merina Varghese, PhD**, Postdoctoral Fellow, Neuroscience

**Yana Zorina, PhD**, former Postdoctoral Fellow, Pharmacology

# National Recognition for Autism Researcher

Joseph D. Buxbaum, PhD, a pioneering researcher in the field of autism, recently was elected to the National Academy of Medicine, considered one of the highest honors in medicine. New members are elected annually by current active members through a selective process that recognizes individuals who have made major contributions to advance medical sciences, health care, and public health.

A world-renowned molecular geneticist and neurobiologist, Dr. Buxbaum is Professor and Vice Chair for Research in the Department of Psychiatry, and Director of the Seaver Autism Center for Research and Treatment at Icahn School of Medicine at Mount Sinai. He is also Professor of Neuroscience, and Genetics and Genomic Sciences, and the G. Harold and Leila Y. Mathers Research Professor of Geriatrics and Adult Development.

Dr. Buxbaum was recognized for his significant contributions to uncovering the genetic and molecular basis of neuropsychiatric disorders, including Alzheimer’s disease, schizophrenia, and autism spectrum disorder.

His research focuses on using techniques of molecular genetics and neuroscience to identify and characterize genes that contribute to disease susceptibility. His laboratory has identified common and rare genetic variants that underlie autism and has developed model systems in which novel therapeutics can be tested. His work has led to clinical trials in rare genetic disorders associated with autism.



Joseph D. Buxbaum, PhD

As the founder and co-leader of the Autism Sequencing Consortium, Dr. Buxbaum also heads an international group of scientists who share autism samples, data, and ideas to accelerate the understanding of the causes of and treatments for autism.

“Dr. Buxbaum’s election is a notable achievement and well-deserved recognition of his leadership and important

contributions to uncovering the genetic and molecular basis of autism spectrum disorder,” says Dennis S. Charney, MD, the Anne and Joel Ehrenkranz Dean, Icahn School of Medicine at Mount Sinai and President for Academic Affairs, Mount Sinai Health System.

## › Cardiac Catheterization Lab Sets Record for Excellence *(continued from page 1)*

rates in all cases and non-emergency cases (see chart). The NYSDOH began publishing PCI safety ratings in 1995. Mount Sinai consistently has the largest number of total cases in New York State.

Two physicians at Mount Sinai Heart, Samin K. Sharma, MD, and Annapoorna Kini, MD, were among only three interventional cardiologists in New York State to be awarded a two-star safety rating for their significantly lower overall mortality rates over a three-year period, performing a total of 6,926 cases between them, according to the report.

“We have a 17-year-long track record of offering the highest level of patient safety in New York State, and this record highlights the very best of cardiac care that is accomplished here at Mount Sinai,” says Dr. Sharma, Director of Clinical and Interventional Cardiology at The Mount Sinai Hospital.

Adds Dr. Kini, Director of the Cardiac Catheterization Laboratory: “The combination of skilled physicians and a team that delivers high-quality patient care, through the universal use of innovative and evidence-based standardized

2012 NY State Department of Health PCI Report			
One-Year Data on Top Five Volume Centers in NY State 30-Day RAMR			
PCI Statistics 2012	# Cases	All Cases	Non-Emergency Cases
1. The Mount Sinai Hospital	4708	0.60**	0.36**
2. Columbia Presbyterian Hospital	2791	0.67	0.30**
3. Saint Francis Hospital	2300	1.04	0.62
4. Saint Joseph's Hospital	2015	0.85	0.68
5. Buffalo General Hospital	1781	1.35	0.98
<b>New York State Total</b>	<b>47,045</b>	<b>1.0</b>	<b>0.64</b>

<http://www.nyhealth.gov> \*\*Risk Adjusted Mortality Rate (RAMR) significantly lower than statewide rate

medical protocol, has contributed to our extraordinary success.”

During the three-year period, The Mount Sinai Hospital’s risk-adjusted PCI mortality rate for all of its cases—emergency and non-emergency—was .59 percent, significantly lower than the statewide average of .93 percent and among the top three rates in New York, while performing the largest number of procedures (14,168). For non-emergency cases over that period, Mount Sinai’s PCI mortality rate was .38 percent, compared with the statewide

average of .59 percent, on the highest volume of procedures.

“I could not be prouder of Dr. Sharma, Dr. Kini, and our Cardiac Catheterization team,” says Valentin Fuster, MD, PhD, Physician-in-Chief of The Mount Sinai Hospital, and 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. “Excellence and patient safety consistently drive our skilled cardiologists to be among the best in their field.”

# Enhancing the Understanding Of Spirituality and Health

Icahn School of Medicine at Mount Sinai has created a new Center for Spirituality and Health that will develop clinical, educational, and research activities to enhance the understanding of the role spirituality plays in the prevention of, and recovery from, illness. The Center, which is an outgrowth of the Mount Sinai Health System Department of Spiritual Care and Education, will also lead a variety of initiatives that support religious expression, promote mutual respect, and encourage open dialogue.

“Our goal is to investigate how spirituality and clinical treatment align so we can provide our patients with the best care we can,” says Deborah Marin, MD, the George and Marion Sokolik Blumenthal Professor of Psychiatry, who was named the inaugural Director of the Center. Dr. Marin says that staff, including physicians, nurses, and social workers throughout the Health System, will be trained to understand and support the potential of spirituality in improving a patient’s well-being.

The announcement was made in November during Spiritual Care Week events held on The Mount Sinai Hospital campus. Activities examined how religion and spirituality impact health care and included lectures, interfaith services, a screening of the documentary *CHAPLAINS*, and recognition of the hospital’s more than 50 dedicated spiritual care volunteers.



From left: Leaders of the Center for Spirituality and Health, in front of the “Tree of Blessings,” which holds patient-written prayers: Reverend Zorina Costello, DMin, Assistant Director and Community Liaison, Department of Spiritual Care and Education, The Mount Sinai Hospital; Rabbi H. Rafael Goldstein, DMin, BCC; Deborah Marin, MD; Reverend David Fleenor, BCC, ACPE, Director of Clinical Pastoral Education, Department of Spiritual Care and Education, The Mount Sinai Hospital; and Vansh Sharma, MD, Medical Director, Center for Spirituality and Health, Mount Sinai Health System.

Says Rabbi H. Rafael Goldstein, DMin, BCC, Director of Clinical Services, Department of Spiritual Care and Education, Mount Sinai Health System, and Assistant Professor of Psychiatry: “We have one of the most culturally diverse patient populations in the nation, and our focus is to integrate spiritual and emotional support into patients’ everyday care.”

## › Using 3D Print Technology to Restore a Child’s Nose *(continued from page 1)*

Dr. Dagan and a team from Oxford Performance Materials, Inc., a leading advanced materials and additive manufacturing (3D printing) company, created a 3D printed facial device that would replicate a natural nose in appearance and functionality. Unlike a standard implant, the device was created using sample models taken from the noses of the patient’s close family members to recreate the most natural and culturally appropriate graft. It also allowed the surgeons to rehearse the complex procedure and create a custom operation to minimize complications.

In June, during the first, 16-hour surgical procedure at New York Eye and Ear Infirmary, Dr. Dagan and Dr. Mashkevich utilized new laser-based technology to scan the surface of the patient’s face and visualize the blood vessels feeding his skin. This helped them determine if the skin was

*“The procedure is akin to a ‘nose transplant’ in that we were able to replace the nose with a functional implant.”*

— Tal Dagan, MD

healthy enough for reconstruction. With tissue and blood vessels harvested from Dallen’s thigh, the surgical team removed large amounts of scar tissue, inserted the graft, and reconstructed the skin over the 3D implant. They performed four additional

surgeries and follow-up outpatient exams between June and October. The result was a full reconstruction of Dallen’s nose, with his senses of smell and taste restored. The implant is permanent, flexible, and will not need to be replaced as he continues to grow.

“We believe that this procedure will allow the patient to live a happy and productive life,” says Dr. Mashkevich. “We also hope that this approach will be a viable option for others with severe facial deformities who require reconstructive surgery.”

New York Eye and Ear Infirmary, Dr. Dagan, and the Visiting Nurse Service of New York provided medical care and equipment for the case. Canvasback Missions provided the necessary funding for the patient and his mother to travel to and stay in the United States during his medical care.

# Around the Health System

## Women's Health Day of Learning and Luncheon

Nearly 400 attendees came to hear leading Mount Sinai Health System physicians at the Women's Health Day of Learning and Luncheon on Thursday, November 12, at The Plaza.

Guests had the choice of attending one of three seminars: "Your Story—Puberty to Menopause," "Every Breath You Take," and "Where Did I Put My Keys?" Michael Brodman, MD, Professor and System Chair, The Ellen and Howard C. Katz Chairman's Chair, Department of Obstetrics, Gynecology and Reproductive Science, Icahn School of Medicine at Mount Sinai, welcomed guests and spoke about the exceptional care across many specialties that the Mount Sinai Health System provides to women throughout their lives. Stacy London, co-host of TLC's popular show *What Not to Wear*, served as keynote speaker. She discussed her personal struggle with psoriasis, body image, and weight.



Above: The Luncheon Chairs of the Mount Sinai Women's Health Day of Learning and Luncheon included, from left: Jennifer Gersten Price, Judy Gersten, Carol Lowenthal, Lisa Lowenthal Pruzan, Leni May, Leslie May Blauner, and Jane G. Rittmaster. Not pictured: Luncheon Chairs Kira Copperman, Friends of Mount Sinai Chair Carolyn B. Sicher, PsyD, and Doctor Chairs Mary Ann McLaughlin MD, MPH, FACC, and Joanne Stone, MD. Left: Doctor Chair Michael Brodman, MD, and Stacy London.



## Saluting America's Veterans

Mount Sinai Health System staff marched up Fifth Avenue from 26th Street to 52nd Street in the 2015 America's Parade New York City on Veterans Day, Wednesday, November 11, honoring the service of United States veterans and saluting those currently serving. This year's Parade commemorated the 70th anniversary of the end of World War II and the 25th anniversary of Operation Desert Shield. The Mount Sinai Health System Military/Veterans Employee Resource Group (ERG) took the lead in organizing staff participation. The ERG is an Office for Diversity and Inclusion initiative that aims to create an inclusive work environment, inspire peer-to-peer mentorship, and collaborate on programs for staff who are members of the military or veterans.

## Gifts for Oncology Patients

For the 19th consecutive holiday season, The Shakira Hyman Foundation has donated toys and other gifts to pediatric and adult oncology patients at The Mount Sinai Hospital. The foundation, created by Madeline Green in honor of her late daughter Shakira, recently delivered toys to the Child Life Zone at Kravis Children's Hospital at Mount Sinai.

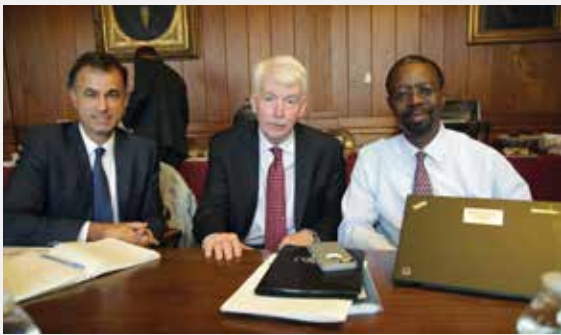
From left: Archimedes Bibiano, Child Life and Creative Arts Therapy Department Relaxation Instructor, Mount Sinai Health System; Foundation Officer Anna Green; Madeline Green; and Sarah Yazdian, MA, LCAT, Senior Creative Arts Therapy Coordinator, Mount Sinai Health System.



## Eliminating the Burden of Pollution-Related Disease

An inaugural gathering of the Commission on Pollution, Health, and Development—comprised of more than 25 world leaders and researchers in the fields of pollution management, environmental health, and sustainable development—was recently held on campus, hosted by the Icahn School of Medicine at Mount Sinai.

The Commission's goal is to eliminate the disease burden of pollution in low- and-middle-income countries by documenting its effects on human health and global economics and influencing international policies. According to the World Health Organization, environmental pollution is the single largest cause of disease and death in these countries and is responsible for almost 9 million deaths around the world each year.



From left: Keith Martin, MD, Executive Director, Consortium of Universities for Global Health; Philip J. Landrigan, MD, MSc; and Olusoji Adeyi, MD, Director, Health, Nutrition and Population Global Practice, World Bank

The Commission Chairs are Philip J. Landrigan, MD, MSc, Dean for Global Health, and Professor of Preventive Medicine and Pediatrics at the Icahn School of Medicine; and Richard Fuller, President of the New York-based nongovernmental organization, Pure Earth. Commissioners include Her Royal Highness Princess Chulabhorn Mahidol, PhD, of Thailand; Carlos Salinas Gotari, PhD, former president of Mexico; Professor Kenneth J. Arrow, PhD, MA, Nobel Laureate in Economics, Stanford University; Christopher Murray, MD, DPhil, Director, Institute for Health Metrics and Evaluation, University of Washington; and representatives of the United Nations Environment Programme and the World Bank.

“We want to send a powerful message to the world's leading policy makers that protecting children and adults from environmental pollution will result in great benefits to human health,” says Dr. Landrigan. “It will also provide enormous economic benefits in terms of decreased medical costs and opportunity costs resulting from lost productivity and economic growth.”

## Honoring Community Service

Randy Retkin, Esq., Director and Founder of LegalHealth, a division of the New York Legal Assistance Group, received the Janice Paneth Community Service Award from The Mount Sinai Hospital Auxiliary Board on Tuesday, November 17, for her long-time dedication to the health and social well-being of the communities served by The Mount Sinai Hospital and Icahn School of Medicine at Mount Sinai.



Randy Retkin, Esq.

Ms. Retkin has been developing and running legal programs that serve low-income individuals for more than 25 years. LegalHealth provides free legal services to individuals with chronic and serious illnesses through partnerships with hospitals and community groups. It also offers an innovative legal education curriculum to physicians, social workers, and other health care professionals.

The Janice Paneth Community Service Award was established in 2006 by the Auxiliary Board in honor of Ms. Paneth, the long-time Associate Director of Mount Sinai Social Work Services.

## Holiday Drive for Eyeglass Donations

New York Eye and Ear Infirmary of Mount Sinai and the Department of Ophthalmology at the Mount Sinai Health System are hosting a drive for eyeglass donations. The glasses will be sent to New Eyes for the Needy, a New Jersey-based, nonprofit volunteer organization that aims to provide better vision to visually impaired individuals in the United States and throughout the world who do not have access to eye services. Adult's and children's prescription and reading glasses in good condition, as well as prescription sunglasses, are being accepted through Thursday, December 31. Donation containers are at two locations:

**New York Eye and Ear Infirmary of Mount Sinai  
Department of Volunteer Services  
310 East 14th Street  
South Building, Basement**

**The Mount Sinai Hospital Campus  
Department of Ophthalmology Faculty Practice  
17 East 102nd Street  
Eighth Floor-West**



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