



Making good on a promise

2016-2017 Annual Report



Feinstein Institute for Medical Research
Northwell HealthSM

The Feinstein Institute for Medical Research advances knowledge for our patients and the world. Here, the world's leading medical researchers join with partners from industry, academia and philanthropy, making innovative therapies a reality.

Table of Contents

| | |
|--|----|
| A Message from Michael J. Dowling and Kevin J. Tracey, MD..... | 3 |
| Overview..... | 4 |
| Achievements | 6 |
| Promises delivered..... | 12 |
| Future promises | 20 |
| Centers of Excellence | 28 |
| Research directory | 33 |
| A message from the Chair of the Board of Directors..... | 66 |
| Board of directors | 67 |
| Financial summary..... | 68 |
| 2016 Honor Roll..... | 69 |
| Payson Wharton Legacy Society | 81 |



At the Feinstein Institute, when we embark on a research endeavor, we make a promise to patients to preserve and potentially even improve their lives.

We are committed to producing knowledge to cure disease. Today, we have 4,000 researchers and staff who work tirelessly so that patients and families can enjoy health — even while fighting cancer, or rheumatoid arthritis, or paralysis from a stroke. The breakthroughs we have made since the last annual report bring us closer to fulfilling our promise; we are proud to describe a few instances in this report.

These successes illustrate the dedication of our staff and the commitment of our patients who take part in research to improve our understanding of disease so that we can provide better treatment. Our efforts are also supported by our fantastic donor community. We would like to thank all of our advocates for their support and make good on a promise that more exciting discoveries are in store in the coming year.

Michael J. Dowling
President and CEO
Northwell Health

Kevin J. Tracey, MD
President and CEO
The Feinstein Institute for
Medical Research

The Feinstein Institute for Medical Research is the research enterprise of Northwell Health and is comprised of four areas of focus:

Basic and Translational Research

Mission: To advance science that will prevent disease and treat patients.

Health Outcomes Research

Mission: To improve the health of our communities by translating scientific discoveries into clinical practice and training the future generations of clinicians and scientists.

Clinical Research

Mission: To create and disseminate knowledge through a patient-centered clinical research program that allows timely access to new technology and the advancement of quality care.

Cancer Institute

Mission: To foster research to uncover the cause, prevention, and treatment of cancer and all associated conditions.

Within the Feinstein Institute, there are leaders in education, management and administration who support our 4,000 researchers and staff to produce knowledge to cure disease.

Scientific leadership



Ping Wang, MD
Chief Scientific Officer



Thomas McGinn, MD, MPH
Senior Vice President, Physician Network Operations, Deputy Physician-in-Chief, Northwell Health, Chair of Medicine, Hofstra Northwell School of Medicine



George Raptis, MD
Senior Vice President, Cancer Service Line, Acting Executive Director, Northwell Health Cancer Institute



To view a video about our leadership, visit bit.ly/2qba4Yr or scan the QR Code at the left.

Educational leadership



David Battinelli, MD
Senior Vice President and Chief Medical Officer, Northwell Health, Dean for Medical Education and Betsy Cushing Whitney Professor of Medicine, Hofstra Northwell School of Medicine



Betty Diamond, MD
Director, MD/PhD and PhD Program, Hofstra Northwell School of Medicine



Annette T. Lee, PhD
Dean, Elmezzi Graduate School of Molecular Medicine



Lawrence Smith, MD
Executive Vice President and Physician-in-Chief, Northwell Health, Dean, Hofstra Northwell School of Medicine



Bettie Steinberg, PhD
Provost, The Feinstein Institute for Medical Research, Chair of Molecular Medicine, Hofstra Northwell School of Medicine

Administrative leadership



Christina Brennan, MD, MBA
Vice President, Clinical Research



John David Chelico, MD, MA, FACP
Vice President of Research Information Technology and Informatics



Thomas R. Coleman, PhD
Director, Office of Technology Transfer



Christopher J. Czura, PhD
Vice President, Scientific Affairs



Cynthia L. Hahn
Chief of Staff



Kirk Manogue, PhD
Vice President, Technology Transfer



Kathleen McGill
Associate Vice President, Administrative Operations



Diane Quinn
Associate Vice President, Finance



Ivar Strand
Vice President, Research Finance

2016 Achievements



Awards and honors

- The New York Academy of Medicine (NYAM) honors Bettie Steinberg, PhD, for her 30-year tenure as a fellow during the organization’s 169th Anniversary Discourse and Awards. Dr. Steinberg was recognized for her innovative research and contributions to the understanding of human papillomaviruses (HPVs) and their role in diseases of the head and neck, as well as to the understanding of cancer metastasis.
- Chad Bouton discusses the future of the emerging field of bioelectronic medicine with colleagues from the Defense Advanced Research Projects Agency (DARPA) and Massachusetts Institute of Technology (MIT) at SXSW Interactive, America’s premier festival of technological and scientific innovation.
- The Feinstein Institute earns the 2016 Gold Electrode Award, Most Valuable Nonprofit Organization from *Neurotech Reports* for having the vision and the fortitude to drive the bioelectronic medicine field forward, and expand neuromodulation technologies into new indications.
- Kevin J. Tracey, MD, wins the Frederik B. Bang Award from The International Endotoxin and Innate Immunity Society (IEIIS) in recognition of his work examining how to control inflammation in treating disease.
- The First Annual Rare Disease Heroes™ Recognition Gala honors Adrianna Vlachos, MD, Jeffrey Lipton, MD, PhD, and Evangelia Atsidaftos, MA, for advancing the treatment of Diamond Blackfan anemia (DBA).
- Kevin J. Tracey, MD, receives the Shock Society’s Scientific Achievement Award for his discoveries in shock, inflammation, sepsis and bioelectronic medicine.
- Chunyan Li, PhD, receives the prestigious ThinkFirst Injury Prevention Award at the American Association of Neurological Surgeons for her presentation titled, “Transient Elevation of Brain Temperature Could Serve as a Surrogate Marker of Cortical Spreading Depolarization,” co-authored by Dr. Li and Raj K. Narayan, MD.
- Daniel A. Grande, PhD, and Chad Bouton receive *Innovate Long Island’s* Innovator of the Year awards for their respective medical innovations in the fields of medical 3D printing technology and bioelectronic medicine.

- The media featured our discoveries as innovative and researchers as thought leaders; examples include *Newsday* coverage of Peter Davies, PhD, exploring psychosis and aggression in Alzheimer’s disease patients, a profile of our 3D printing capabilities in *Crain’s New York Business*, John M. Kane, MD, and his NIMH-funded RAISE Early Treatment Program to improve first episode schizophrenia treatment in *The New York Times*, and Thomas McGinn, MD, and his work using technology to reduce unnecessary tests and antibiotics by ruling out certain diseases in *The Wall Street Journal*.
- The story of bioelectronic medicine continues to interest mainstream media with a profile of Kevin J. Tracey, MD, in *The Wall Street Journal*, a segment on the rheumatoid arthritis clinical trials on BBC’s *Trust Me I’m a Doctor*, and extensive coverage of Chad Bouton’s paper in *Nature*, which garnered 8 billion media impressions equating to a publicity value of approximately \$49 million.
- Sewit Teckie, MD, is honored by the publication *Super Doctors* with the Super Doctors® Rising Stars New York Award, which is designed to identify physicians who have attained a high degree of peer recognition and professional achievement.
- The American College of Gastroenterology (ACG) honors Keith Sultan, MD, with the 2016 ACG Category Award (IBD) for his poster presentation, “Increased Blood Transfusion Requirements with Pharmacologic Venous Thromboembolism Prophylaxis During IBD Exacerbation.”
- *Long Island Business News* honors Corey Karlin-Zysman, MD, with the Long Island Business News Achievements in Health Care Award for her tireless work, contributions and dedication to healing and caring for the well-being of everyone on Long Island.
- Seth Koenig, MD, receives the Alfred Soffer Award in Editorial Excellence from the *CHEST* journal for his work in developing the Ultrasound Corner for the publication.
- The Association of Rheumatology Health Professionals awards Christine Stamatos, DNP, ARNP, the Distinguished Clinician Award at the ceremony of the Annual Meeting of the American College of Rheumatology/Association of Rheumatology Health Professionals.
- Shamik Chakraborty, MD, senior neurosurgery resident from the Feinstein Institute’s Brain Tumor Biotech Center, is named the first-place winner of the Resident Research Award from the New York Society of Neurosurgery for his presentation “Overcoming the Blood/ Brain Barrier for the Treatment of Malignant Brain Tumors.”
- Lior Brimberg, PhD, receives the International Society of Autism Research’s (INSAR) Young Investigator Award at the International Meeting for Autism Research for her paper titled, “Caspr2-reactive Antibody Cloned from a Mother of an ASD Child Mediates an ASD-like Phenotype in Mice,” which she co-authored with Simone Mader, PhD.



Partnerships

- The Feinstein Institute announces a strategic alliance with GE Ventures to support the the Feinstein’s Center for Bioelectronic Medicine (CBEM) to continue its work in discovering, developing and commercializing new diagnostic and therapeutic solutions in bioelectronic medicine for a wide range of acute and chronic diseases and injuries, including neurodegenerative diseases, cancer, diabetes and hypertension.
- The Feinstein Institute and United Therapeutics Corporation (NASDAQ: UTHR) announces a strategic partnership focused on the application of bioelectronic medicine and cell therapy to cardiology, hypertension and post-transplant tolerance induction. Under the strategic partnership, United Therapeutics will fund the Feinstein Institute’s efforts in four research and development tracks, while United Therapeutics will bring the results into clinical development.
- The Feinstein Institute partners with the Global Good Fund, a collaboration between Intellectual Ventures and Bill Gates to invent technology that improves life in developing countries; and Sanguistat, Inc., a medical device company, on clinical trials of the Neural Tourniquet to evaluate the efficacy of bioelectronic medicine in treating blood loss associated with postpartum hemorrhage.
- Northwell Health and the Feinstein Institute partner with Indivumed, GmbH to greatly expand cancer biobanking activities within Northwell Health that will be used to help develop anti-tumor drugs and personalized medicine approaches. It will also substantially enhance Northwell Health’s recent affiliation with Cold Spring Harbor Laboratory.
- Ron Duguay, a former New York Ranger and current Emmy Award-winning analyst for the MSG Network, partners with Northwell Health and the Feinstein Institute to promote Alzheimer’s education and awareness following his father’s recent death from the disease.
- Diane Horowitz, MD, and Peter K. Gregersen, MD, work with the National Institutes of Health’s Accelerating Medicines Partnership (AMP) program on a project to collect synovial tissue obtained from ultrasound guided synovial biopsies in patients with rheumatoid arthritis. The overall goal is to develop markers in synovial tissue that will help to guide therapy for patients with rheumatoid arthritis.

Scientific milestones

- Rifka C. Schulman, MD, profiles patients admitted to a respiratory care unit (RCU) and found that patients who received intravenous pamidronate had lower mortality in the RCU at one year than those who did not. These findings were published in the journal, *Endocrine Practice*.
- Clinical trial data published in the *Proceedings of the National Academy of Sciences (PNAS)* demonstrates that stimulating the vagus nerve with an implantable bioelectronic device significantly improves measures of disease activity in patients with rheumatoid arthritis (RA). This reinforces the discovery made by Kevin J. Tracey, MD, that vagus nerve stimulation can reduce cytokine levels and inflammation.
- In a Letter to the Editor in the prestigious *New England Journal of Medicine*, Kenar D. Jhaveri, MD, and Richard Barnett, MD, profile a novel drug combination of steroids and sirolimus, an immunosuppressant that has anti-cancer properties, that has the potential to prevent rejection of a donor kidney in transplant patients undergoing cancer treatment. The novel drug combination allows the rapidly emerging cancer therapies called immune checkpoint inhibitors to be incorporated into a transplant patient's cancer treatment regimen.
- Todd Lencz, PhD, and a team of international scientists studied the genes of 35,000 people and discovered new genetic variations related to cognitive ability. The findings, published in *Molecular Psychiatry*, bring scientists a step closer to developing new — and potentially better — treatments for cognitive disorders of the brain, such as schizophrenia and attention deficit hyperactivity disorder (ADHD).
- Catherine Benedict, PhD, and Joanne Kelvin, MSN, RN, AOCN, discover that many young adult females who survive cancer do not receive enough information about their fertility as part of their survivorship care. The findings, which are published in *Cancer*, underscore the need for better resources to support cancer survivors in making informed decisions about their reproductive options after treatment is completed.
- Kevin J. Tracey, MD, discovers that T-cells that contain an enzyme choline acetyltransferase (ChAT) are capable of producing the neurotransmitter acetylcholine, which can regulate blood pressure. Having now identified ChAT cells' new role and previously knowing that they respond to vagus nerve stimulation, Feinstein Institute researchers will explore using bioelectronic medicine to treat blood pressure and hypertension. These findings were published in the prestigious journal, *Nature Biotechnology*.
- Patricio T. Huerta, PhD, and his team discover more details about how the vagus nerve triggers the immune system, better understanding how bioelectronic medicine treats disease. The researchers mapped neural mechanisms of the vagus nerve and identified new neural pathways — they will now focus their attention on using bioelectronic medicine to activate these neural pathways and treat a wide variety of conditions and diseases. These results are part of a new study published in *Bioelectronic Medicine*.
- Michael A. Diefenbach, PhD, previews a new software application that guides patients living with prostate cancer through the treatment decision process at this year's Centricity Series Symposia: Clinical Research 2016 — Taking Discoveries from the Bench to the Bedside.
- The Feinstein Institute convenes the Key Symposium, a first-of-its-kind gathering at the New York Academy of Sciences, where researchers from some of the world's leading universities and institutions gathered to discuss the various applications of bioelectronic medicine, which include new therapies for cancer, battlefield wounds, paralysis, rheumatoid arthritis and other acute diseases and injuries.
- In 2016, after implementing a sepsis protocol across Northwell Health's 21 hospitals for more than five years, sepsis-related mortalities within Northwell Health's hospitals have been reduced by nearly 70 percent, which equates to thousands of lives saved. Feinstein Institute's Clifford S. Deutschman, MS, MD, continues to study to identify additional signs/factors to help health professionals diagnose sepsis.
- The Feinstein Institute partners with the Rory Staunton Foundation for Sepsis Prevention to create several public service announcements (PSAs) in an effort to increase awareness about sepsis and its signs.
- Paola DiMarzio, PhD, MPH, Joe P. McGowan, MD, and Rebecca Schwartz, PhD, partner with biotechnology company Gilead Sciences to understand the impact of polypharmacy on medication adherence as well as test the use of the medication adherence smartphone-based application, "Technology for Engagement And Management of Health" (TEAMH), to track both medication adherence and medication side effects in real-time among people living with HIV comorbidities.
- Marc Symons, PhD, examines if a common medication administered to treat pinworms, mebendazole, could replace the current treatment used for certain brain cancers. These findings, published in the Feinstein Institute Press's peer-reviewed, open-access journal *Molecular Medicine*, could help to extend the lives of patients suffering from one of the most common types of brain tumors — low-grade glioma.

Notable grants and support

- Leonard and Susan Feinstein make a \$25 million contribution to the Feinstein Institute to further expand its research efforts in areas including clinical trials, neuroscience, autoimmunity and bioelectronic medicine. The Feinstein Institute was renamed in the Feinsteins' honor in 2005 after they provided an initial \$25 million leadership gift.
- The National Institutes of Health awards Betty Diamond, MD, and Peter K. Gregersen, MD, a two-year, \$3 million grant to explore the relationship between a mother's autoimmunity during pregnancy and the risk of autism spectrum disorders (ASD) in her child.
- Kevin J. Tracey, MD, and Ping Wang, MD, each receive five-year grants — one for \$3 million and another for \$2 million — from the National Institutes of Health as part of the National Institutes of Health's new Maximizing Investigators' Research Awards (MIRA). Dr. Tracey's research aims to understand unanswered questions about the molecular mechanisms controlling inflammation. Dr. Wang will look to further explain the mechanisms responsible for inflammation during sepsis, with the goal to design and develop therapies to treat the condition.
- The Patient-Centered Outcomes Research Institute (PCORI) awards Negin Hajizadeh MD, MPH, a \$1.5 million grant to study whether home-based pulmonary rehabilitation improves quality of life and decreases hospitalization in Hispanic patients with moderate to severe chronic obstructive pulmonary disease (COPD).
- Renee Pekmezaris, PhD, Maria Torroella Carney, MD, FACP, and Christian Nouryan, MA, receive a \$40,000 grant from New York State's Department of Health's Empire Clinical Research Investigator Program (ECRIP) to further test their Bedside Capacity Assessment Tool (BCAT) and its effectiveness in assessing a patient's capacity to make health decisions in an inpatient setting.
- Catherine Benedict, PhD, is awarded a \$165,000 grant from the National Institutes of Health for her study, "Developing a Decision Aid for Adolescent and Young Adult Female Cancer Survivors Considering Future Family-Building after Treatment."
- Maria Torroella Carney, MD, FACP, is awarded an \$87,000 grant from the United Jewish Appeal-Federation of Jewish Philanthropies of New York, Inc., for a study which aims to improve care for frail elderly patients visiting the emergency department.
- David Bernstein, MD, was awarded a \$2 million grant from Gilead Sciences to help link newly identified patients with chronic Hepatitis C at Northwell Health to treatment providers within their geographic region, streamlining access to HCV anti-viral therapy through patients' current insurance, combined with medication counseling, discussion of drug-drug interactions, and patient support.
- Renee Pekmezaris, PhD, and Alyson Myers, MD, receive a \$40,000 grant from New York State's Department of Health's Empire Clinical Research Investigator Program (ECRIP) to study if an in-home telehealth program for elderly minority patients with type 2 diabetes can improve overall health and wellbeing, by getting them to stick to scheduled treatments and by decreasing hypoglycemic events.



- Safiya Richardson, MD, receives a five-year \$172,875 grant from the National Institute of Health's National Institute of Allergy and Infectious Diseases to test the effectiveness of the integrated clinical prediction rule (iCPR) system when paired with the nation's largest commercial electronic health record (EHR) in reducing unnecessary diagnostic testing and overuse of antibiotic prescribing in diverse ambulatory settings.

Welcome



Kristina M. Deligiannidis, MD

Director, Women's Behavioral Health,
Zucker Hillside Hospital (from University of
Massachusetts at Amherst)



Kenan Onel, MD, PhD

Chief, Division of Human Genetics and
Genomics (from the University of Chicago)



Robert G. Maki, MD, PhD

Investigator in sarcoma cancer
(from Mount Sinai)



▾ Promises delivered



Saving lives from sepsis

In May 1985, Kevin J. Tracey, MD, was working as a neurosurgery resident when he met Janice. At 11 months old, she had crawled on the kitchen floor under her grandmother's legs, causing her to trip and accidentally spill a pot of boiling pasta water onto her granddaughter.



1 million Americans are diagnosed with sepsis annually — 50 percent of cases are fatal.

We aim to know the early signs of sepsis.

Severely scalded over most of her body, Janice was Dr. Tracey's patient for a month. In the end, she went into shock and died in his arms. She had no evidence of infection.

"Her shock was unexplainable, and I was haunted by her case. She was so innocent, yet I was at a complete loss to understand the mechanism for her death," said Dr. Tracey. "I went into the laboratory in July and began to study the molecular basis of shock and inflammation. I promised myself I would find out what happened to Janice and make sure there were less cases like this. I have been studying it ever since."

Today, we know much more than we did in 1985. We know that what Janice faced was sepsis — the body's overreaction to infection that leads to organ deterioration and ultimately loss of life. Sepsis affects more than one million Americans each year, and 50 percent of those affected die. Dr. Tracey's lab continues to study sepsis. The Northwell Health Sepsis Task Force, headed by Martin Doerfler, MD, is taking Dr. Tracey's work and bringing it into clinical

practice. Knowing that early detection and a shortened diagnosis time are key to preventing loss of life to sepsis, Drs. Doerfler and Tracey identified a protocol based upon rapid assessment of signs of organ injury, which includes administering fluids and antibiotics immediately upon diagnosis. This protocol was implemented across Northwell Health's hospitals in 2008.

Ryan Barnett is one of thousands of lives saved because of this work.

"My son's pediatrician told me that he had a stomach virus, but mother's intuition told me otherwise. And when Ryan got worse, the ambulance took us to Northwell Health where immediately they recognized he had sepsis," said Kathleen Theune, Ryan's mother. "Ryan is alive today, playing lacrosse and acting like a normal teenager, because of Northwell Health knowing better. I couldn't be more thankful for the research and protocols in place so that I still have my son with me."

To view a video about our efforts in sepsis, visit bit.ly/2p1CO8b or scan the QR Code at the right.





Intervening schizophrenia

John M. Kane, MD, Feinstein Institute professor and senior vice president, Behavioral Health Services, Northwell Health, has worked at Zucker Hillside Hospital for more than 30 years. Over that tenure, he became a champion for those suffering from schizophrenia, dedicating much of his professional medical career to research on the condition.

3.5 million Americans are living with schizophrenia.
We're working to make sure they receive the care they need sooner.

“One of the first patients I treated with schizophrenia in medical school was a young man around my age who was bright, very well educated, but he had these fixed false beliefs called delusions,” Dr. Kane said. “It was hard for me to understand how anyone, especially someone that was at a similar stage in life as me, could believe the things that he believed. The patient had been hospitalized more than once before he came under my care and was not doing as well as hoped. It was this man who inspired my research into schizophrenia — I wanted to solve this puzzle and help patients maintain a normal course of life.”

Dr. Kane’s initial research explored the effects of medication to treat schizophrenia and was integral to the research that led to the first US Food and Drug Administration (FDA)-approved medication for treatment-resistant schizophrenia.

Dr. Kane’s line of study most recently has focused on the early intervention programs for mental illness. “Early identification and engagement in treatment is an important component to improved mental health because we were seeing that the duration of untreated illness was remarkably long and recovery rates from a first episode of schizophrenia were not great,” Dr. Kane said. “We also found that the duration of illness before someone receives any treatment was a predictor of outcome.” He and his colleagues set out to develop and implement a coordinated specialty

care model to improve the trajectory of early phase schizophrenia called the RAISE Early Treatment Program. They conducted a study involving 34 community care clinics in 21 states across the US. The RAISE program looks to act early on identifying and treating patients with schizophrenia. Clinicians using the RAISE program found that those patients who received coordinated specialty care, intended to optimize medication management and provide individual as well as family therapy and psychoeducation along with supported employment or education, made greater strides in improvement and return to work or school over the first two years of treatment than patients who received usual care.

Based on the findings of this study, Dr. Kane is now a public advocate for early intervention programs, and has spoken before congressmen about their benefits. His testimony likely influenced the 21st Century Cures Act, a 2016 law which includes a provision requiring states to use at least 10 percent of their mental health block grants on early intervention for psychosis. This important piece of mental health legislation inspired by Dr. Kane’s work will help to fund early intervention, and ultimately improve outcomes for this population that he has dedicated his life to help.



Pursuing science and advancing women

The curriculum of the all-girls high school that Betty Diamond, MD, attended emphasized history and literature, so she pursued art history in college until senior year when she thought to herself: “What am I going to do with an art history degree? I don’t want to teach.” When she realized that science was more interesting to her, she attended a summer science program.



46% of those working in life, physical and social science occupations are women.

We are looking to empower women to continue to grow within the scientific arena.

At the end of the program, during an evaluation of her scientific potential, she was told that she would have to choose between an interest in science and an interest in men. She decided to go to medical school. From the moment Dr. Diamond learned about lupus in medical school, she knew she wanted to study it and make a difference in the lives of patients suffering from autoimmune diseases.

Today, Dr. Diamond is the head of the Center for Autoimmune and Musculoskeletal Disease. She leads a laboratory and center of scientists and doctors dedicated to researching and treating major types of autoimmune disease, including arthritis, lupus, hearing disorders, multiple sclerosis, spinal cord injury and disc degeneration. Dr. Diamond is consistently one of the top recipients of NIH funding in the New York metropolitan area.

Throughout her scientific career, Dr. Diamond has remembered how she was told during high school that she would have to choose between science or men. She faced other gender biases and inequalities, and while she recognized these as unfortunate incidents that often arise from habit, misplaced energy or inattention, rather than from malice, she was motivated to ensure a supportive environment for women at the Feinstein Institute.

“The facts are that female scientists have lower salaries than their male counterparts, need to have more publications to be

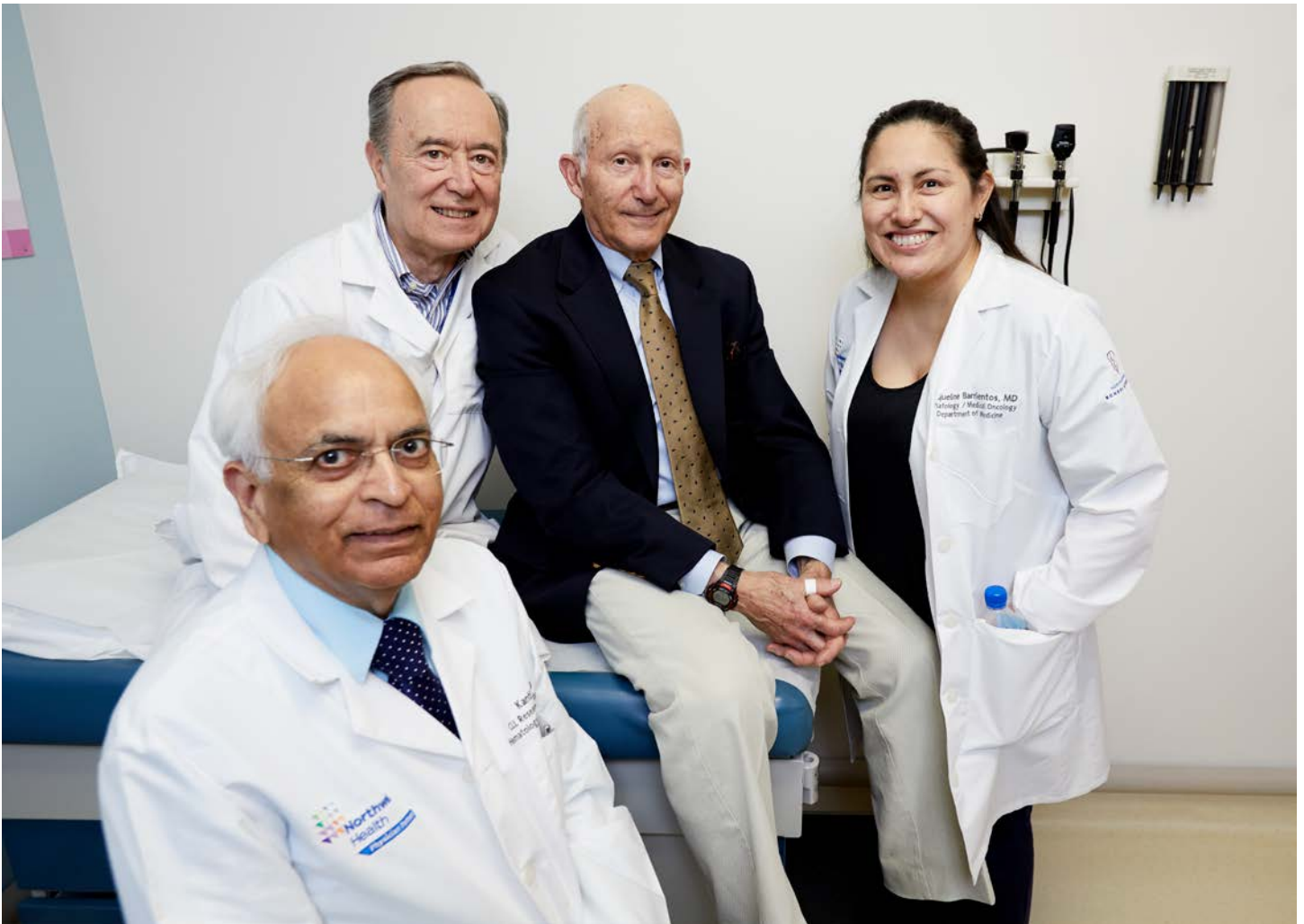
considered for promotion, and only a very few are chosen to write reviews and speak at national meetings,” said Dr. Diamond. “Furthermore, what may be surprising is that we have learned that women, themselves, contribute to the lack of advancement of women scientists — they can be competitive more than collaborative and too insecure to be supportive. If we look at successful women, we see that what they have in common is someone providing encouragement and advocating for them in professional fora. What we need instead of more anger, more self-pity or more amassing of data is self-confidence, empowerment and mutual support.”

With this in mind, and with a community of interested women, Dr. Diamond and several others started an organization of female scientists call AWSM (pronounced “awesome”), which stands for Advancing Women in Science and Medicine. AWSM aims to empower women and provide them with financial support, positive reinforcement, scientific critiques and assistance, recommendations for advancement and professional opportunity within the institution and at national and international organizations. The group also reaches young women in high school, college and thereafter who are interested in science. Their main goals are at least two-fold: 1) to aid scientists during a time when support from many private and government sources is low, and 2) to re-educate female and male colleagues through performance,

ability to nurture and support, self confidence, willingness to engage, and intelligence. AWSM has made great strides since its beginnings in 2010. They have raised \$605,000 in donor support. Most importantly, women scientists at the Feinstein Institute are more successful and are finding more satisfaction in their work.

“AWSM has achieved success in gaining recognition for women in science and showcasing their impressive achievements,” said Kevin J. Tracey, MD, president and CEO of the Feinstein Institute. “The initiative is important to the Feinstein Institute. We want to ensure that women in science feel supported and celebrated today and in the future.”

“We need to maintain our progress and continue to demonstrate that the diversity in the workplace contributes to a better work product and a better community,” said Dr. Diamond.



Battling leukemia for 60 years

Kanti R. Rai, MD, made a promise 60 years ago that has saved hundreds of lives. While still a resident in 1958 at North Shore University Hospital, Dr. Rai observed the case of a three-year-old girl named Lori who was diagnosed with acute childhood leukemia.

20,110 new Americans will be diagnosed with CLL. We're looking to extend the lives of each and every one.

While treatable — and even curable today — this condition was a death sentence at the time. Despite administering all available treatments, Lori passed away after six months. Devastated that Lori couldn't be saved, Dr. Rai promised that he would devote himself to saving others from leukemias and other cancers.

"After the death of Lori, my teacher and mentor Dr. Arthur Sawitsky suggested I go into research so I did," said Dr. Rai. "During the course of my research, in the clinic, I was seeing two patients with chronic lymphocytic leukemia (CLL). One had been suffering from CLL for 12 years and was still doing well and living a full life, while the other was diagnosed under a year ago and was close to death. I had to find out why there was such a disparity in prognosis."

In the 60s, after conducting 10 years of research with Dr. Eugene Cronkite as his mentor at the Brookhaven National Laboratory, Dr. Rai developed the Rai Staging System, which is still used today by medical professionals to help determine severity and course of treatment for CLL. CLL is a cancer of the blood and bone marrow and the most common type of leukemia in adults.

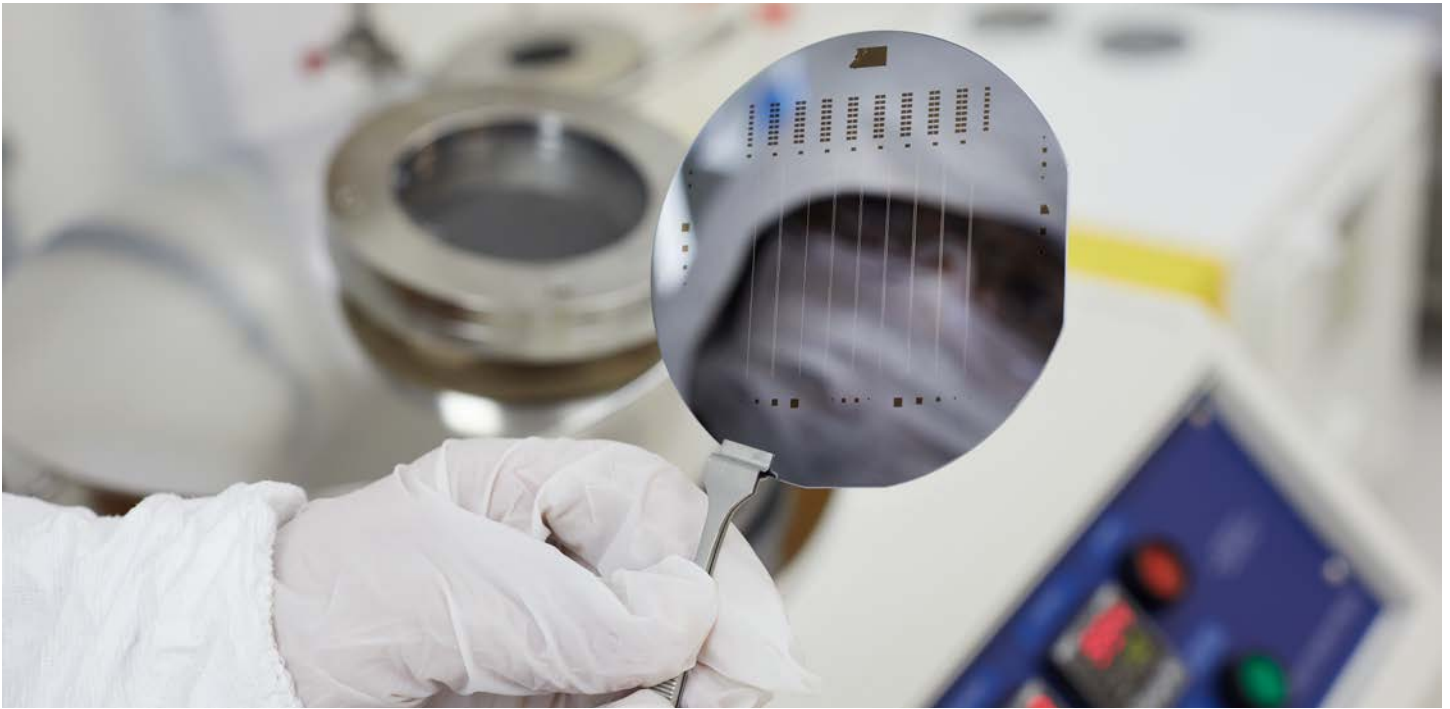
Since then, Dr. Rai has acted as an educator and mentor, helping to inspire the next generation of researchers who are studying CLL. He currently collaborates with Nicholas Chiorazzi, MD, and Jacqueline Claudia Barrientos, MD, who continue to make discoveries in the diagnosis and treatment of CLL.

Drs. Rai, Chiorazzi and Barrientos' most recent research has focused on the activation and maturation of B-lymphocytes in CLL. CLL cells are responsive to signals, in particular those delivered by the B-cell antigen receptor (BCR), leading to leukemic cell growth or death. They have found that the type of BCR a patient has can influence the progression of their disease. These findings have led to further refinement of patient prognosis. The team is also conducting clinical trials of various drugs and chemo-immunotherapies.

The results of this lifetime dedication can be experienced in the stories of grateful patients. Abe Bernstein is one of them. Mr. Bernstein participated in a clinical trial led by Drs. Rai, Barrientos and Chiorazzi. Thirty days after being treated in the clinical trial, Mr. Bernstein, an avid runner for more than 50 years, participated in the Penn Relays, the oldest track and field event in the US. At age 75, while undergoing treatment, Mr. Bernstein was able to not only compete, but he also took third place in the 100 meter in the 75 to 79 age group. Now that his cancer is in remission, Mr. Bernstein continues to compete and is one of the top three US track competitors in his age bracket.

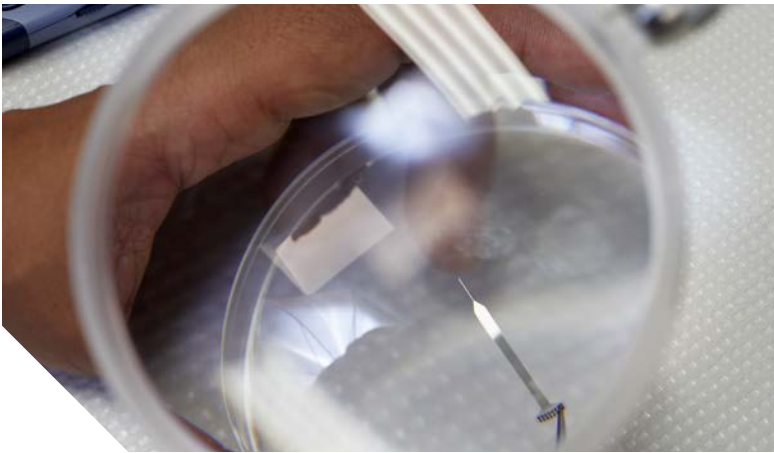
"Without Dr. Rai, Dr. Barrientos and Dr. Chiorazzi's research, I would be dead," Mr. Bernstein said. "Thanks to their discoveries, I have been able to maintain the active life I was living before being diagnosed with CLL. In fact, it seems I might be healthier today — the last time I ran in the Penn Relays back in 1960, I did not place. Now I was able to win third place!"

Future promises



Using nerves to treat disease

Imagine a day when microchips replace most drugs. This might sound like a science fiction novel, but with Feinstein Institute research, bioelectronic medicine could make this a reality, and sooner than you might think.



45 million patients are living with conditions — from paralysis to diabetes — that bioelectronic medicine could help improve.

We aim to harness the power of the nervous system to treat these conditions.

Through investment in cutting-edge resources, expert staff and strategic partnerships, the Feinstein Institute's Center for Bioelectronic Medicine (CBEM) is the engine driving this new area of medicine. Findings made in the center prove bioelectronic medicine is a promising treatment for a variety of conditions.

"Within the last year, we opened five new labs, including the only Class 100 clean room in Nassau County, Long Island," said Chad Bouton, director of the Center for Bioelectronic Medicine. "With these new labs, we are developing new bioelectronic medicine devices aimed to treat a variety of medical conditions. When we couple these new capabilities with our existing expertise, there is no doubt in my mind that we will innovate an entirely new class of treatment options for patients."

In a study published in the prestigious *Proceedings of the National Academy of Sciences*, researchers from the Feinstein Institute, Academic Medical Center/ University of Amsterdam and SetPoint Medical found that an implantable bioelectronic stimulation device could reduce the pain and inflammation in

patients suffering rheumatoid arthritis. The findings of this study show that instead of treating rheumatoid arthritis with pharmaceutical agents that are costly, often not effective and have numerous side effects, in the future it could be treated with a stimulation device, which is implanted once and does not produce harmful side effects.

Bleeding and hemorrhage is another area of focus for the Center. Even though there are more than half a million blood loss deaths each year, the treatment for bleeding (wrapping a rubber tourniquet around the wound) hasn't changed since their first use in ancient Greece more than two thousand years ago. The Feinstein Institute is developing the Neural Tourniquet — a medical device that uses electronic vagus nerve stimulation to reduce blood loss. We envision a day when the Neural Tourniquet could be used by first responders to car accidents to treat bleeding trauma victims and by fellow military personnel to treat the blood loss of wounded service men and women on the battlefield. In 2016, it was announced that the Feinstein Institute, the Global Good Fund, a collaboration between Intellectual Ventures and Bill Gates, and

Sanguistat Inc., are partnering on clinical trials of the Neural Tourniquet to evaluate its efficacy in treating blood loss associated with postpartum hemorrhage, the leading cause of maternal deaths worldwide, killing close to 80,000 women in Africa and Asia, and approximately 6,000 in the US each year.

Beyond rheumatoid arthritis and bleeding/hemorrhage, Feinstein Institute researchers are finding new ways to understand the language of the nervous system to perform advanced diagnostics with immediate plans to look into devices to treat paralysis. They are developing bioelectronic technologies to decode and re-route signals around devastating spinal cord injuries to restore movement in paralyzed patients and intend to start tackling restoring the sense of touch. This research may be applied to treating stroke and brain injuries in new ways as well as provide a foundation for advanced neural signal detection, which may be used to diagnose and treat disease earlier in its progression. Other conditions the CBEM team will study as candidates for bioelectronic medicine include diabetes, lupus, hypertension, post-transplant tolerance induction and potentially cancer.

To view a video of our work in bioelectronic medicine, visit bit.ly/2p1wT3j or scan the QR Code at the right.





Using robots to regain movement

Like most patients who suffer from strokes, there was no warning that Kathleen Taravella would experience a blockage of blood to her brain. She went to bed, only to wake hours later with a feeling that something was not right.

Ms. Taravella roused her husband, Santo, who helped her reach the care she needed to survive and begin the process of recovering from her incident.

A stroke occurs when blood flow to the brain is interrupted, typically by a blockage in a blood vessel. Depending on the portion of the brain affected by the stroke and the extent of the damage, patients may experience a variety of post-incident side effects including muscle weakness, cognitive difficulties and vision and language problems.

“My child was very young at the time of the stroke, so I was worried that, with my limitations, I would not be capable of being a good mother,” Ms. Taravella said. “I was

given the opportunity to participate in a clinical study using robotics, and I went for it. Whatever I could do to be the mother I envisioned, I was going to do.”

Ms. Taravella began rehabilitation with Bruce T. Volpe, MD, and Johanna Z. Chang and their team in the Laboratory for Stroke Rehabilitation Research. Using technology developed in collaboration with investigators from Massachusetts Institute of Technology (MIT), the Feinstein Institute team mapped out a treatment plan that included the use of a series of robotic devices. Active assist devices are robots designed specifically to help patients similar to Ms. Taravella with limited mobility in their arms, hands and legs. During a typical therapy session, patients’

6.3 million adults in the US have a stroke each year.

We aim to restore their ability to move.

arms are connected to a robotic arm with a joystick-like handle. In front of the patient, a monitor displays a target. Patients must move their limbs to match up with different points around the target. These points move, and the patient must speed up to reach the target and make movements with more precision.

Under the watchful eye of Ms. Chang and her support staff, patients complete the series of movements to the best of their abilities. When they are not successful, the robot steps in, putting their limbs through the completed motion. Feinstein Institute researchers hope these devices will help train the impaired limb to repeat motions on its own over time and that the challenge will help maintain patients' motivation and attention.

"Using the Feinstein Institute's robot program is like playing a video game, and it helps me push myself harder," Ms. Taravella said. "After my session is finished, even though it is challenging, I want to do more so that I can regain use of my arms and legs."

Under Ms. Chang's guidance, Ms. Taravella's therapy was expanded to include bioelectronic stimulation, another advanced treatment protocol being explored by researchers at the Feinstein Institute. In these trials, stroke therapy with robotics is combined with external stimulation. Patients who have had a stroke experience increased activation of their spinal cord signals, which causes muscles to tighten. This can present as hands being permanently clenched, making fine motor skills difficult.

Ms. Chang believes that stimulation can help quiet the noisy signals of the spinal cord so the body's motor system can take over. She and her team are conducting two studies into the use of nerve stimulation in stroke patients and plan to publish study results within the next year.

"The latest studies we are conducting are noticeably improving patient's mobility not only during an on-site session, but also after a session while at home," said Ms. Chang. "This is why I love my job and working with my team — it is clear that our research and technology are helping those recovering from stroke live the lives they lived before stroke, and you can tell they are so thrilled and appreciative of that."

"After rehabilitation with the robots and receiving stimulation, I can move my arms and legs better," Ms. Taravella said. "I no longer worry about not being a good mother. With Johanna's help, I am able to do what I need to do to be the mother I want to be."

"This is why I love my job and working with my team — it is clear that our research and technology are helping those recovering from stroke live the lives they lived before stroke, and you can tell they are so thrilled and appreciative of that."

-Johanna Z. Chang

To view a video of our stroke robots, visit bit.ly/2oIXbEI or scan the QR Code at the right.





Creating digital solutions for patients

Mobile devices have become a part of our daily routine and very soon could play an active role in health care and medical decision-making.

Over the past years, mobile health solutions have been developed to address serious issues in behavioral health. Much like mobile devices have changed how we conduct business and interact with friends and loved ones, they have also begun to impact health care by offering support for patients with chronic conditions and guidance in decision-making. Feinstein Institute researchers harness mobile technology's potential to impact patient care by developing digital solutions to help with everything from reducing problem drinking to providing personalized health decision support.

For those who face excessive social or binge drinking, finding a successful treatment plan is often challenging. Like many behavioral health issues, treatment for problem drinking requires multiple support systems like one-on-one therapy and mutual support groups. Frederick Muench, PhD, Feinstein Institute researcher and director of Northwell Health's Digital Health Interventions in Psychiatry, theorized that text messaging might help reduce problem drinking for patients. His studies confirm that when people affected by problem drinking receive texts tailored to their current situation and past drinking



15.1 million adults in the US have an alcohol use disorder.

We're designing tools to reduce that number.

behaviors, they reduced their drinking just as much as others who received in-person treatments. The availability of mobile systems, like Dr. Muench's, could provide instantaneous support for patients facing real-world challenges and offer access to treatment in remote areas, where attending therapy may not be convenient.

In addition to problem drinking, Dr. Muench studies other areas of behavioral health, including impulsivity control issues. Recently he has partnered with Cornell Tech and Sage Bionetworks to design smartphone-based tools to support patient efforts to change impulsive behaviors and improve resistance to unhealthy temptations.

A second area of active behavioral research at the Feinstein Institute involves support for patients making treatment decisions after a cancer diagnosis. In particular, newly diagnosed prostate cancer patients not only have to cope with a cancer diagnosis but also need to consider different treatment recommendations that can affect very personal aspects of life, such as incontinence and impotence. To help guide their decision, Michael A. Diefenbach, PhD, Feinstein Institute researcher and director of Northwell Health's Behavioral Research, has developed a web-based decision-making tool that allows patients to reconcile their personal values and lifestyles with a treatment recommendation.

The software prompts patients to consider a series of statements regarding different treatment implications that helps them evaluate each treatment option. The results from this brief evaluation can then be used to more thoroughly discuss their preferred treatment with their health care provider.

"We like to treat each patient as an individual and offer solutions that can be implemented into their lives and daily routine," said Thomas McGinn, MD, MPH, senior vice president, Physician Network Operations, and deputy physician-in-chief, Northwell Health, chair of medicine, Hofstra Northwell School of Medicine. "Those who suffer from addiction or cancer often want privacy and the ability to make treatment decisions based on their own preferences. The applications being developed by Dr. Diefenbach and Dr. Muench empower patients to do that by offering resources on their personal mobile devices."



Personalizing treatment through a living biobank

Over the last decade, physicians and scientists have become increasingly aware that genetic factors dictate our physical and mental characteristics, and can be used to detect and manage a wide range of health problems.

Feinstein Institute researchers are diving deeper and examining the genetics of those that are sick and those that are well to find a genetic definition of “what is well.” Defining “what is well” can help medical professionals see, depending on that person’s particular genetics, what is required to bring a patient to health. Through research using the biobank, Northwell Health researchers and doctors hope to soon use a patient’s own DNA to develop a personalized treatment plan.

The Northwell Health biobank, overseen and maintained by Peter K. Gregersen, MD, and James M. Crawford, MD, PhD, is one of the largest and most diverse collections of blood and tissue in the New York metropolitan area. Samples for the

biobank come from Northwell Health’s 21 hospitals, which serve the most culturally diverse population in the US. Having such a diverse pool to study is advantageous to research because it allows examination of how different factors such as age, race and medical histories play into different diseases and conditions. Through strategic affiliations, we also provide the samples from our biobank to researchers outside of Northwell Health, giving them access to samples they wouldn’t have access to otherwise.

“With the biobank, we are aiming not only to advance research and discovery but to establish new standards of care for patients,” said James M. Crawford, MD, PhD, executive director and senior vice president



1.6 million Americans will be diagnosed with cancer this year.

We aim to use genetics to develop a targeted diagnosis and treatment plan.

of laboratory services for Northwell Health, who has been integral in growing Northwell's biobank. "The system we have established with the biobank can be seen as a circle — Northwell Health provides patient care and obtains tissue or blood that can be used for research; the discoveries can then be brought back from partners like Cold Spring Harbor Laboratory, the Feinstein Institute and others to Northwell Health patients for first-to-human clinical trials and therapy."

The biobank is a critical component of a successful strategic partnership in cancer with Cold Spring Harbor Laboratory (CSHL), a leader in molecular biology and genetics research. One of the reasons why cancer is so difficult to treat is because the cells in a tumor do not necessarily share features with their tissue-of-origin — they can exhibit the genetic characteristics of a different type of cancer. For example, a patient could have colon cancer that exhibits the same genetic characteristics typically found in lung cancer. This is where the biobank can be an asset to treatment. A patient's tissue is taken during a procedure and brought to the lab to grow a copy of the patient's tumor and then test that tumor's genetic and functional characteristics. Once these characteristics are determined, the team can best identify an effective treatment for that patient. Going back to the example, it may be best to treat a patient's colon cancer tumor with a treatment for lung cancer based on those genetic and functional characteristics.

A new member to the Feinstein Institute, investigator Kenan Onel, MD, PhD, is helping to spearhead the Institute's genomics initiatives and is using this research to find treatments for pediatric cancer. Dr. Onel sees children as a potential barometer for

the genetic causes of both pediatric and adult cancers because their bodies have not been exposed to as many environment or lifestyle factors as their adult counterparts. One of his studies is GREAT Kids (Genomics for Risk Evaluation and Anti-cancer Therapy in Kids), which is examining the genetics of children with cancer and their family members to look for early indicators of the disease. The hopes of this study are to help prevent the patients' other family members from getting cancer and translate genetic markers found into cancer identifiers for other patients. Dr. Onel's research focus then goes beyond cancer, through his LIFE (Long Island Family Empowerment) Project, which will follow 20,000 children treated by Northwell Health and their parents for their entire lives to examine the genetic and environmental factors which contribute to different health conditions. By understanding what contributes to disease and wellness, Dr. Onel and his team hope to develop preventative diagnostics and more targeted treatment.

Feinstein Institute Professor Peter K. Gregersen, MD, an expert in genetics, has established a unique biobanking program called the Genotype and Phenotype (GaP) registry. The GaP is essentially a "living biobank" of volunteer subjects who agree to be recalled for specific research studies based on their genetic makeup. Over 7,000 volunteers have signed up for the GaP over the last decade, and over 80 research studies have been carried out using this resource, including by investigators from leading research institutions nationwide. An expansion of the GaP to 50,000 volunteers is planned in order to accommodate interest from researchers around the world.

One such study is directed to developing new diagnostic and treatment approaches

for endometriosis. Endometriosis, which affects approximately 176 million women globally, is a condition in which tissue from the uterus grows outside the uterus, causing significant pain and discomfort — it may even lead to infertility. It often takes more than 10 years to diagnose as it can be mistaken for other conditions, and to confirm that it is endometriosis, patients have to undergo surgery. Dr. Gregersen's team is developing a novel test that may allow for early diagnosis of the disease so that patients may be treated early and not have to undergo surgical treatments.

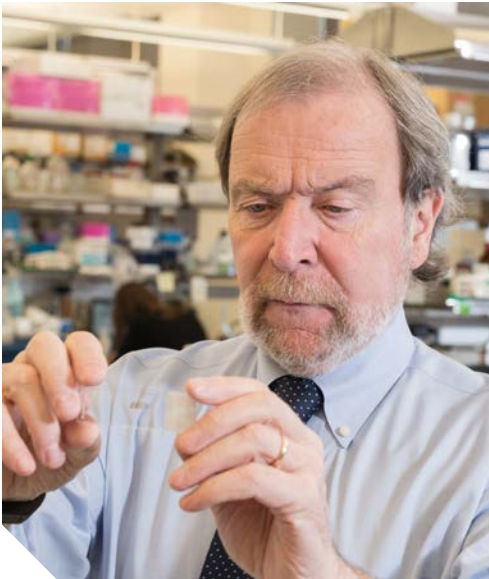
Drs. Crawford and Gregersen and George Raptis, MD, senior vice president, Cancer Service Line, acting executive director, Northwell Health Cancer Institute, are working to expand the scope of the benefits of the biobank to help all patients who enter Northwell Health hospitals. Following patient consent, Northwell Health hospitals will be able to test patients' blood with a DNA "chip" called the Global Screening Array (GSA), which can quickly characterize a person's DNA and identify particular genetic markers of disease. The information from this test can help medical professionals more rapidly diagnose conditions and develop a personalized treatment plan. Patients will also have the option to have these samples included in the Northwell Health biobank to help move research forward with the goal of providing personalized treatment based on genetics.

"Northwell Health is one of the first health organizations to incorporate a GSA into its standard diagnostic protocols," said Dr. Gregersen. "This cutting-edge technology will help to accelerate diagnosis and identify effective treatment while also providing data to help researchers develop the next generation of targeted therapies."

Centers of Excellence

The Feinstein Institute basic and translational research pillar is comprised of 11 Centers of Excellence with more than 55 research programs.





Litwin-Zucker Center for Alzheimer's Disease and Memory Disorders

The Litwin-Zucker Center for Alzheimer's Disease and Memory Disorders is the only dedicated Alzheimer's disease research facility on Long Island. Those in the center are committed to identifying new ways to detect and treat Alzheimer's disease. This effort is critical not only to our local community, but to the population overall — as a result of the aging population and increased life expectancy, the number of Americans age 65 and older with Alzheimer's disease may nearly triple by 2050.

PETER DAVIES, PhD



Center for Autoimmune and Musculoskeletal Disease

The immune system is a complex set of cells and tissues that protect the body from invaders such as viruses or bacteria. Sometimes, however, this system goes awry and mistakes its own cells as invaders and repeatedly attacks them — this is called autoimmunity. Researchers in the Center for Autoimmune and Musculoskeletal Disease focus on major types of autoimmune diseases, including arthritis, lupus, hearing disorders, multiple sclerosis, spinal cord injury and disc degeneration. They extensively research the function of risk genes and the mechanisms of tissue injury and develop novel therapies to treat them.

BETTY DIAMOND, MD



Center for Bioelectronic Medicine

Bioelectronic medicine is a pioneering new field of medicine that uses small devices to allow the body to treat itself without manufactured drugs and their associated side effects. The Center for Bioelectronic Medicine's labs use a first-of-its-kind team-based approach, combining expertise in neurophysiology, neuroscience, molecular and cell biology, and bioengineering in each study. Researchers are learning the language of neural signals so that they can listen for signals of disease or injury. They are using bioelectronic medicine technologies to record, stimulate and block neural signals, which is essentially teaching the body how to heal itself.

CHAD BOUTON

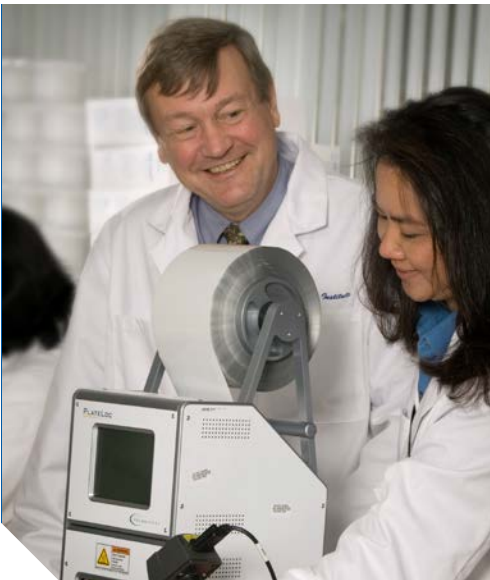


Center for Biomedical Science

Researchers in the Center for Biomedical Science focus on the molecular basis of inflammation and identifying the mechanism by which neurons control the immune system.

In fact, they discovered that the brain controls the immune system — this is now termed the inflammatory reflex.

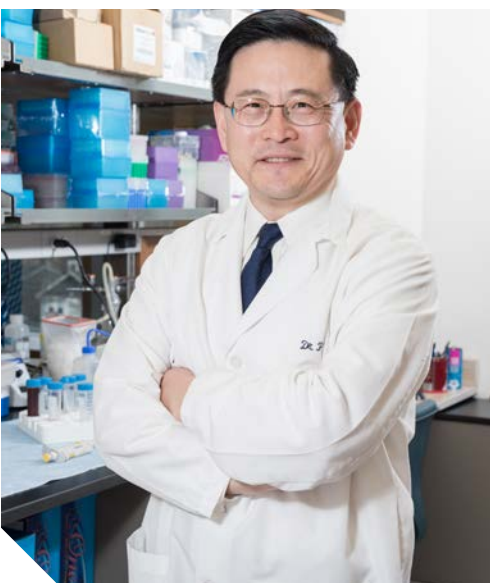
KEVIN J. TRACEY, MD



Robert S. Boas Center for Genomics and Human Genetics

The mission of the Robert S. Boas Center for Genomics and Human Genetics is to identify and understand the genetic contribution to human diseases and translate these discoveries into new diagnostics and therapeutics. Center researchers are focused on autoimmune diseases and neuropsychiatric traits and disorders, and conduct a full range of human genetics research.

PETER K. GREGERSEN, MD



Center for Immunology and Inflammation

Researchers in the Center for Immunology and Inflammation focus on understanding the basic biological principles of the immune system that protect the body against infections, environmental hazards and internal challenges, and how this system is impaired in disease. They carry out basic, translational and patient-oriented research on a range of immune and inflammatory disorders, including sepsis, allergy and hypersensitivity, kidney injury, cancer, immune deficiency, HIV infection and conditions affecting maternal, fetal and neonatal health. Their ultimate goal is to develop improved treatments for these life-threatening conditions.

PING WANG, MD



Center for Molecular Innovation

The Center for Molecular Innovation leads the discovery and development of novel therapeutics, improving the lives of patients suffering from a variety of conditions including lupus, arthritis, diabetes, Alzheimer's disease and sepsis. It integrates innovative approaches in target discovery with medicinal chemistry to generate small organic compounds and potential drugs. The center's discoveries have identified several drug candidates and uncovered existing drugs that could be repurposed to target critical proteins involved in neurodegenerative and autoimmune diseases.

The Center for Molecular Innovation also shares findings with the Center for Bioelectronic Medicine to help uncover molecular triggers of disease and health, which could be potential targets for treatment with bioelectronic medicine.

YOUSEF AL-ABED, PhD

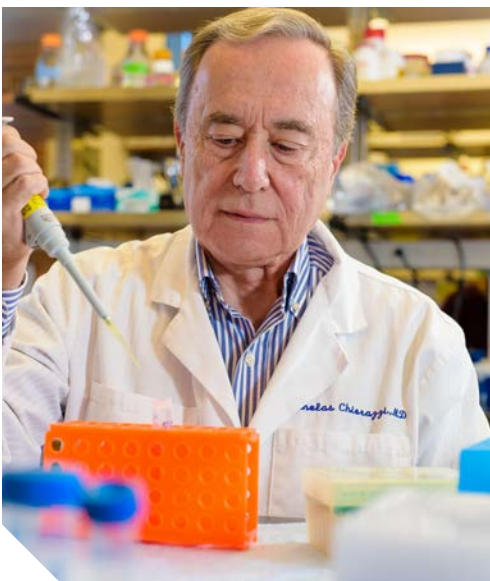


Feinstein Center for Neuroscience

The mission of the Feinstein Center for Neuroscience is to shed light on the abnormalities of functional brain organization that underlie nervous system disease.

To characterize these networks as biomarkers of disease and treatment, investigators use multimodal brain imaging in conjunction with novel computational methods. Study populations include healthy volunteers and patients with Parkinson's disease, Alzheimer's disease, Huntington's disease, dystonia and Tourette syndrome.

DAVID EIDELBERG, MD



Karches Center for Oncology

Researchers in the Karches Center for Oncology study cancer and related aspects of cell biology, all geared toward understanding the abnormal growth and behavior of cells that have been malignantly transformed. This information is used to develop and test new diagnostics and treatments for patients suffering from various types of cancers.

NICHOLAS CHIORAZZI, MD



Merinoff Center for Patient-Oriented Research

The Merinoff Center for Patient-Oriented Research encompasses research using epidemiology, statistics and laboratory trials to uncover ways to improve how we deliver care. Researchers examine all levels of health care delivery, from patient-provider interactions to federal policy regulations, and contribute to developing clinical practice improvements, reducing disparities and health care costs. They engage in a wide range of research projects and investigate outcomes in many medical conditions, including cancer, heart failure, diabetes, substance abuse, kidney disease, COPD and asthma, motility disorders, pain, dementia and delirium. The center also leverages technology to change health care today by integrating evidence-based tools at the point of care, delivering culturally competent interventions to reduce health disparities and using mobile technology to bring health care needs to patients' homes.

THOMAS MCGINN, MD, MPH



Center for Psychiatric Neuroscience

The mission of the Center for Psychiatric Neuroscience is to study behavioral health to identify causes, triggers, markers and treatments for such illnesses as bipolar disorder, schizophrenia and other psychotic disorders.

Combining different perspectives in multi-disciplinary research is key to making advances in these illnesses. The Feinstein Institute and the Zucker Hillside Hospital provide valuable platforms to advance such efforts.

JOHN M. KANE, MD



Research directory

There are 4,000 Feinstein Institute investigators and staff who conduct research in bioelectronic medicine, immunology, inflammation, neurology, obstetrics/gynecology, oncology, pediatrics, psychiatry, surgery, urology, genetics and many other specialties. These scientists collaborate with more than 13,000 physicians across Northwell Health.

Together, they touch the lives of millions of patients each year in the organization's 21 hospitals, more than 550 physician practices and a vast network of skilled-nursing home care rehabilitation facilities. The organization's footprint throughout the New York metropolitan area includes some of the most ethnically-diverse communities in the US, providing an immense opportunity for clinical research faculty and staff who recruit more than 15,000 subjects per year into more than 2,100 active studies. Feinstein Institute

investigators are internationally-acclaimed authorities in their scientific and medical fields. They win prestigious awards, belong to exclusive scientific and medical honor societies, and are invited worldwide to lecture about their research. Their discoveries are published in the most prestigious scientific and medical journals.

The directory to follow highlights select Feinstein Institute investigators organized first by their specialty and then alphabetically by name.

This directory includes researchers who have a Feinstein Institute appointment, are Investigators and/or are on a "scientific track."

Autoimmune Research

AUTOIMMUNE AND MUSCULOSKELETAL DISEASE

Cynthia Aranow, MD
Yoshiyuki Arinuma, MD, PhD
Betsy J. Barnes, PhD
Ramalingam Bethunaickan, PhD
Lionel Blanc, PhD
Ona E. Bloom, PhD
Lior Brimberg, PhD
Nadeen Chahine, PhD
Anne Davidson, MBBS
Betty Diamond, MD
Giovanni Franchin, MD, PhD
Richard A. Furie, MD
Hua Gu
Patricio T. Huerta, PhD
Sun Jung Kim, PhD
Czeslawa Kowal, PhD
Jeffrey M. Lipton, MD, PhD
Meggan Mackay, MD
Shresh Pathak, PhD
Elisabeth Ploran, PhD
Tam Quach, PhD
Meera Ramanujam, PhD
Frances Santiago-Schwarz, PhD
Myoungsun Son, PhD
Joel Stern, PhD
Andrea Vambutas, MD
Adrianna Vlachos, MD
Robert B. Zurier, MD

BIOMEDICAL SCIENCE

Ulf Andersson, MD, PhD
Sangeeta S. Chavan, MD
Clifford S. Deutschman, MD
Jared M. Huston, MD
Jacob Levine, PhD
Wei Li, MD, PhD
Ben Lu, MD
Christine Metz, PhD
Lars Peder S. Olofsson, MD, PhD
Valentin A. Pavlov, PhD
Jesse Roth, MD
Kevin J. Tracey, MD
Sergio Valdes-Ferrer, MD, PhD
Bruce T. Volpe, MD
Haichao Wang, PhD
Ping Wang, MD
Huan Yang, MD, PhD

IMMUNOLOGY AND INFLAMMATION

Monowar Aziz, PhD
David Battinelli, MD
Lance Becker, MD, FAHA
Vincent R. Bonagura, MD
Max Brenner, MD, PhD
Wayne (Wenren) Chaung, PhD
Gene Coppa, MD
Sleiman Ghorayeb, PhD
Junhwan Kim, PhD
Xiqian Lan, PhD
Shu Fang Liu, MD, PhD
Ashwani Malhotra, PhD
William Nealon, MD
Jeffrey Nicastro, MD
Mahendar Ochani, MD
Kaie Ojamaa, PhD
Jose Prince, MD
Horacio Rilo, MD
Barbara Sherry, PhD
Pravin C. Singhal, MD
Asha Varghese, PhD
Weng-Lang Yang, PhD
Mian Zhou, MD
Yong-Rui Zou, PhD

Brain Research

ALZHEIMER'S DISEASE AND MEMORY DISORDERS

Cristina D'Abramo, PhD
Peter Davies, PhD
Yun Freudenberg-Hua, MD
Terry E. Goldberg, PhD
Marc L. Gordon, MD
Philippe Marambaud, PhD

NEUROSCIENCE

John Boockvar, MD
Thomas Chaly, PhD
Stephen Dewey, PhD
Vijay Dhawan, PhD
David Eidelberg, MD
Deborah Elkins-Abuhoff, PhD
Andrew S. Feigin, MD
David Groppe, PhD
Marta Hauser, PhD
Joshua Lampe, PhD
David J. Langer, MD
Chunyan Li, PhD
Yilong Ma, PhD
Paul J. Mattis, PhD, ABPP-CN
Ashesh Mehta, MD, PhD
Fredrick Muench, PhD
Phoebe Spetsieris, PhD
An Vo, PhD

PSYCHIATRIC NEUROSCIENCE

Miklos Argyelan, MD
Anita Barber, PhD
Emily Barkley-Levenson, PhD
Amit Baumel, PhD
Michael Birnbaum, MD
Cathy Budman, MD
Eric Chang, PhD
Daniel Coletti, PhD
Barbara A. Cornblatt, PhD
Christoph U. Correll, MD
Kristina Deligiannidis, MD
Pamela DeRosse, PhD
Terry Goldberg, PhD
Marta Hauser, PhD
Vivian Kafantaris, MD
John M. Kane, MD
Jeremy Koppel, MD
Todd Lencz, PhD
Anil Malhotra, MD
Fredrick Muench, PhD
Anthony Pinto, PhD
Delbert G. Robinson, MD
Keith M. Shafritz, PhD
Jianping Zhang, MD, PhD

Oncology Research

Steven Allen, MD
Davide Bagnara, PhD
Jacqueline C. Barrientos, MD
Ruthee L. Bayer, MD
Thomas Bradley, MD
Daniel R. Budman, MD
Jane Carleton, MD
Amanda (YanFan) Chan, PhD
Shih-Shih Chen, PhD
Kit Cheng, MD
Nicholas Chiorazzi, MD
James D'Olimpio, MD
Craig DeVoe, MD
Laura Donahue, MD
Cristina Ghiuzeli, MD
Daniel A. Grande, PhD
Benchang Guo, PhD
Vinita Gupta, MD
Mark Hoffman, MD
Veena John, MD
Elena Katzap, DO
Jonathan E. Kolitz, MD
Anna Levy, DO
Haixiang (Hudson) Liang, MD
Johnson Liu, MD
Doru Paul, MD
Tony Philip, MD
Louis Potters, MD
Kanti R. Rai, MD
Sadia Riaz, DO
Thomas L. Rothstein, MD, PhD
Rosamaria Ruggieri, PhD
Steven Savona, MD
Steven Schneider, MD
Michael Schulder, MD
Nagashree Seetharama, MD, MBBS
Ravi Sharaf, MD, MS
Amy Sharma, MD
Ruby Sharma, MBBS
Samuel Z. Soffer, MD
Alex Spyropoulos, MD
Bettie M. Steinberg, PhD
Kevin M. Sullivan, MD
Marc H. Symons, PhD
Sewit Teckie, MD
Eleonora Teplinsky, MD
Sarah Rivkah Vaiselbuh, MD
Vincent Vinciguerra, MD
Lora Weiselberg, MD

Rong Wu, MD, PhD
Xiao Yan, MD, PhD
Xinhua Zhu, MD

Genomics and Human Genetics

Peter K. Gregersen, MD
Annette T. Lee, PhD
Wentian Li, PhD
Kenan Onel, MD, PhD
Andrew Shih, PhD
Kim R. Simpfendorfer, PhD

Heart and Lung Research

Harly Greenberg, MD
Edmund Miller, PhD
Alex Spyropoulos, MD
Arunabh Talwar, MD

Molecular Innovation

Yousef Al-Abed, PhD
Kai-Fan Cheng, PhD

Patient-Oriented Research

Allan Abramson, MD
Mohamed Ahmed, MD, PhD
Meredith Akerman, MS
Melissa Basile, PhD
Franak Batliwalla, PhD
Ruthee L. Bayer, MD
Catherine Benedict, PhD
David Bernstein, MD
Lauren Block, MD, MPH
Thomas Bradley, MD
Ronald Burakoff, DMD, MPH
Jane Carleton, MD
Maria T. Carney, MD
Kit Cheng, MD
Champa Codipilly, PhD
Jessica Cohen, MD
Joseph Conigliaro, MD, MPH
Peter Costantino, MD
James Crawford, MD
John D'Angelo, MD

James D'Olimpio, MD
Rachel Dankner
Craig DeVoe, MD
John DiCapua, MD
Michael Diefenbach, PhD
Paola DiMarzio, PhD, MPH
Laura Donahue, MD
Bruce Farber, MD
Deborah Farzan, MD
Steven Fishbane, MD
Joanna Fishbein, MPH
Adiel Fleischer, MD
Amit Garg, MD
Cristina Ghiuzeli, MD
Harly Greenberg, MD
Blaine Greenwald, MD
Vinita Gupta, MD
Negin Hajizadeh, MD, PhD
Tobi Harris, MD, PhD
Alan Hartman, MD
Bruce Hirsch, MD
Jamie Hirsch, MD
Gloria Y.F. Ho, PhD
Mark Hoffman, MD
Tochi Iroku-Malize, MD, MPH
Veena John, MD
Artemio Jongco III, MPH, MD, PhD, FACP, FAAAAI, FACAAI
Barry Kaplan, MD
Corey Karlin-Zysman, MD, MPH
Stanley Katz, MD
Elena Katzap, DO
Louis R. Kavoussi, MD
Darcy King, PhD
Myriam Kline, PhD
Nina Kohn, MBA, MA
Andrzej Kozikowski, PhD
Lewis Lane, MD
Martin L. Lesser, PhD
Anna Levy, DO
Diane Lewis Horowitz, MD
Tara Liberman, DO
John N. Makaryus, MD
Prashant Malhotra, MD
Galina Marder, MD
Lyndonna Marrast, MD, MPH
Anna Mathew, MD, MPH
Paul Mayo, MD
Thomas McGinn, MD
Joseph McGowan, MD

Edmund Miller, PhD
Larry Miller, MD
Jacqueline Moline, MD
Jeanne Morley, MD
Alyson Myers, MD
Jason Naidich, MD, MBA
Souhel Najjar, MD
Sonal Narain, MD
Michael Nimaroff, MD
Chris Nouryan, PhD
Doru Paul, MD
Renee Pekmezaris, PhD
Tony Philip, MD
Mariecel Pilapil, MD, MPH
Leonid Poretsky, MD
Karin Rhodes, MD
Sadia Riaz, DO
Safiya Richardson, MD, MPH
Lisa Rosen, ScM
Pina Sanelli, MD, MPH
Steven Savona, MD
Richard J. Schanler, MD
Charles Schleien, MD
Rebecca Schwartz, PhD
Julie Schwartzman-Morris, MD
Nagashree Seetharama, MD, MBBS
Nicholas Sgaglione, MD
Ravi Sharaf, MD, MS
Amy Sharma, MD
Ruby Sharma, MBBS
Robert A. Silverman, MD
Henry Simpkins, MD, PhD
Varinder Singh, MD
Liron Sinvani, MD
Cristina Sison, PhD

Phyllis W. Speiser, MD
Adam Stein, MD
Kevin M. Sullivan, MD
Keith Scott Sultan, MD
Arun Swaminath, MD
Anthony Szema, MD
Sewit Teckie, MD
Arunabh Talwar, MD
Eleonora Teplinksy, MD
Glenda Trujillo, PhD
James Tsang, MPH
Ira Udell, MD
Omolaru Uwemedimo, MD, MPH
Janice Wang, MD
Jason Wang, PhD
Mary Frances (Mae) Ward, RN, MS, ANP, CCRC
Lora Weiselberg, MD
Paul Wright, MD
Meng Zhang, PhD
Xinhua Zhu, MD

Bioelectronic Medicine

Chad Bouton
Daniel A. Grande, PhD
Chunyan Li, PhD
Raj K. Narayan, MD
Harbaljit 'Harbi' Singh Sohal, PhD
Theodoros P. Zanos, PhD



ALLAN ABRAMSON, MD
Patient-Oriented Research

Dr. Abramson's research focuses on otolaryngology and diseases of the airway. He is collaborating with others on a clinical trial studying a treatment for recurrent respiratory papillomatosis.



MOHAMED AHMED, MD, PhD
Patient-Oriented Research

Dr. Ahmed's research focuses on neonatal lung biology and oxidative stress, and the effect of free radicals induced by hyperoxia/hypoxia exposure on a premature lung.



MEREDITH AKERMAN, MS
Patient-Oriented Research

Ms. Akerman is a biostatistician and works with other researchers to design studies, collect data, choose and implement the appropriate statistical methodologies, and interpret study results.



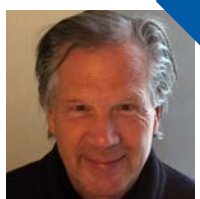
YOUSEF AL-ABED, PhD
Molecular Innovation

Dr. Al-Abed leads the Center of Molecular Innovation, which aims to discover and develop novel therapeutics for human diseases including lupus, arthritis, diabetes, Alzheimer's disease and sepsis. This research integrates target discovery with medicinal chemistry to generate small organic compounds and potential drugs.



STEVEN ALLEN, MD
Oncology Research

Dr. Allen conducts clinical trials involving the treatment of patients with hematologic malignancies like chronic lymphocytic leukemia (CLL).



ULF ANDERSSON, MD, PhD
Biomedical Science

Dr. Andersson's research focuses on inflammation with an aim to generate novel therapies to alleviate human diseases. His current work is concentrated on nuclear protein (HMGB1) and its role in the inflammatory response. He has recently developed HMGB1 antagonists for clinical studies.



CYNTHIA ARANOW, MD
Autoimmune and Musculoskeletal Disease

Dr. Aranow specializes in lupus and rheumatoid arthritis. She is the clinical director of the Feinstein Institute Center for Clinical Research in Autoimmune Disease and co-director of the Clinical Trials Unit. She conducts studies to better understand and develop treatments for diseases such as lupus and rheumatoid arthritis.



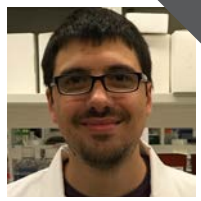
MIKLOS ARGYELAN, MD
Psychiatric Neuroscience

Dr. Argyelan's research projects are in schizophrenia and electroconvulsive therapy, and he aims to develop new insights in the pathophysiology of neuropsychiatric disorders.



MONOWAR AZIZ, PhD
Immunology and Inflammation

Dr. Aziz’s research focuses on understanding the underlying mechanisms of sepsis to develop better therapies to prevent progression of organ injury and septic shock.



DAVIDE BAGNARA, PhD
Oncology Research

Dr. Bagnara’s research studies B-cells in health and disease, in particular chronic lymphocytic leukemia (CLL).



ANITA BARBER, PhD
Psychiatric Neuroscience

Dr. Barber’s research focuses on brain networks underlying cognitive control functions and their development, both in neurotypical and clinical populations. She uses task and resting state fMRI to understand how brain networks synchronize and de-synchronize their activity to perform these functions.



BETSY J. BARNES, PhD
Autoimmune and Musculoskeletal Disease

Dr. Barnes’ laboratory studies a family of transcription factors that demonstrate being immune regulators and tumor suppressors. Her lab’s specific interests are in blood cancers, breast cancer and autoimmune diseases, including lupus.



JACQUELINE C. BARRIENTOS, MD
Oncology Research

Dr. Barrientos’ research focuses on chronic lymphocytic leukemia (CLL) and lymphoma. She is a principal investigator of numerous clinical research studies from early stage development to registration trials investigating new CLL therapies.



MELISSA BASILE, PhD
Patient-Oriented Research

Dr. Basile is a medical anthropologist in the area of implementation and dissemination science. Her research focuses on processes of deliberation and decision-making for patients with advanced chronic lung diseases.



DAVID BATTINELLI, MD
Immunology and Inflammation

Dr. Battinelli’s research focuses on clinical education, faculty development of teaching skills and internal medicine.



AMIT BAUMEL, PhD
Psychiatric Neuroscience

Dr. Baumel’s research interests revolve around technology-assisted psychological interventions. He is currently focused on studying novel ways to use technology in the promotion of public well-being.



RUTHEE L. BAYER, MD
Oncology Research,
Patient-Oriented Research

Dr. Bayer is an oncologist with a focus on bone marrow transplants.



LANCE BECKER, MD, FAHA
Immunology and Inflammation

Dr. Becker's research focuses on the acute resuscitation of dying and critically sick patients. A current focus of his lab at the Feinstein Institute is on developing emergency cardiopulmonary bypass coupled with advanced drugs to save lives of patients who fail traditional advanced cardiovascular life support (ACLS) treatment.



CATHERINE BENEDICT, PhD
Patient-Oriented Research

Dr. Catherine Benedict is a NY state-licensed clinical psychologist and behavioral medicine researcher with a primary focus in psycho-oncology. She specializes in developing empirically-based interventions that support patient decision-making and promote adaptive behavior change and positive health outcomes.



DAVID BERNSTEIN, MD
Patient-Oriented Research

Dr. Bernstein's research focuses on viral hepatitis, nonalcoholic fatty liver disease, primary biliary cholangitis, autoimmune liver disease, liver cancer, cirrhosis, outcomes in liver disease, access to care and public policy. His most recent work is concentrated on developing new treatments for chronic hepatitis C.



RAMALINGAM BETHUNAICKAN, PhD
Autoimmune and Musculoskeletal Disease

Dr. Bethunaickan's research focuses on molecular immunology to understand the functions of the innate immune system, particularly the mononuclear phagocytes within autoimmune disorders and infectious diseases. He is currently working on the molecular analysis of monocyte subsets among humans infected with mycobacterium tuberculosis.



MICHAEL BIRNBAUM, MD
Psychiatric Neuroscience

Dr. Birnbaum's research focuses primarily on psychotic disorders with an emphasis on the early stages of illness and first-episode schizophrenia. He has explored components essential for the development of successful early intervention services, reducing the duration of untreated psychosis, and improving engagement and long-term functional outcomes



LIONEL BLANC, PhD
Autoimmune and Musculoskeletal Disease

Dr. Blanc's research focuses on developmental erythropoiesis and its impairment in pathological conditions and why genetic disorders in erythroid development trigger a cancer predisposition in children, notably osteogenic sarcoma.



LAUREN BLOCK, MD, MPH
Patient-Oriented Research

Dr. Block's research focuses on trainee wellness, interprofessional education and curriculum development.



ONA E. BLOOM, PhD
Autoimmune and
Musculoskeletal Disease

Dr. Bloom’s research focuses on identifying the molecular factors necessary to recover from central nervous system (CNS) injury or disease. Toward that goal, her lab is investigating factors that influence the course of CNS injury or disease, as well as the process to recover from CNS injury or disease.



VINCENT R. BONAGURA, MD
Immunology and Inflammation

Recurrent respiratory papillomatosis (RRP) is a disease caused by the human papillomavirus (HPV) — it is the recurrence of tumors of the upper airway that can lead to airway blockages and suffocation. Dr. Bonagura studies the immune response to HPV to understand why RRP patients do not produce the needed immune response to prevent or control the virus.



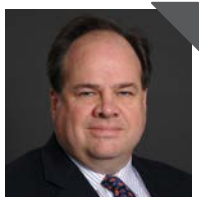
JOHN BOOCKVAR, MD
Neuroscience

Dr. Boockvar’s research interests focus on malignant brain tumor formation, treatment and ways to overcome resistance to therapy. In addition to his basic science interests, he currently conducts multiple clinical trials using blood-brain barrier disruption to deliver high-dose chemotherapy for patients with malignant brain tumors.



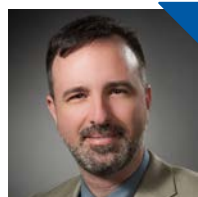
CHAD BOUTON
Bioelectronic Medicine

Mr. Bouton researches and develops biomedical technology with a focus in neurotechnology and analytics. Most recently, he developed neural decoding methods allowing the first paralyzed person with a brain implant to move again with his own thoughts.



THOMAS BRADLEY, MD
Oncology Research,
Patient-Oriented Research

Dr. Bradley is an oncologist specializing in genito-urinary malignancies — prostate cancer, kidney cancer, bladder cancer and testicular cancers, and is involved in conducting clinical trials of treatments associated with these conditions.



MAX BRENNER, MD, PhD
Immunology and Inflammation

Dr. Brenner’s research goal is to discover and develop better treatments for patients with autoimmune and inflammatory diseases. Recent areas of focus include rheumatoid arthritis and inflammatory bowel disease.



LIOR BRIMBERG, PhD
Autoimmune and
Musculoskeletal Disease

Dr. Brimberg’s research focuses on maternal brain reactive autoantibodies in autism. She discovered that mothers of children with autism have an increased frequency of anti-brain antibodies and is working to develop a therapeutic target for autism.



CATHY BUDMAN, MD
Psychiatric Neuroscience

Dr. Budman studies Tourette syndrome (TS) and related conditions. She is actively involved in clinical research treatment studies in the field with a focus on explosive outbursts in children and adults with TS and associated psychiatric disorders.



DANIEL R. BUDMAN, MD
Oncology Research

Dr. Budman conducts preclinical, translational and phase I, II and III clinical research in an effort to determine new drug developments for cancer.



RONALD BURAKOFF, DMD, MPH
Patient-Oriented Research

Dr. Ronald Burakoff is Chairman of the Department of Dental Medicine at Long Island Jewish Medical Center (LIJMC) and North Shore University Hospital (NSUH). He is the founding chair and professor of the Department of Dental Medicine at Hofstra Northwell School of Medicine. He is also the chair of the Appointments and Promotions Committee of the new medical school. His research focuses on Dental Health Service Delivery Systems.



JANE CARLETON, MD
Oncology Research,
Patient-Oriented Research

Dr. Carleton's research focuses on breast cancer prevention and treatment.



MARIA T. CARNEY, MD
Patient-Oriented Research

Dr. Carney's Research focuses on advanced care planning, vulnerable populations, capacity assessment, shared decision-making, elder abuse and palliative medicine.



NADEEN CHAHINE, PhD
Autoimmune and
Musculoskeletal Disease

Dr. Chahine's research focuses on degeneration and regeneration of musculoskeletal tissues, particularly intervertebral disc, articular cartilage and tendonous tissues. Her lab uses tools of bioengineering, cellular and molecular biology and animal physiology to develop new treatment strategies for repairing arthritic and diseased musculoskeletal tissues.



THOMAS CHALY, PhD
Neuroscience

Dr. Chaly's research focuses on the development of Positron Emission Tomography (PET) Radiopharmaceuticals, an innovative new technology for the diagnosis of Parkinson's disease, Alzheimer's disease and tumor monitoring. He has recently received FDA approval for three Radiopharmaceuticals for PET imaging.



AMANDA (YANFAN) CHAN, PhD
Oncology Research

Dr. Chan's research focuses on the molecular mechanisms that are responsible for tumor cell invasion and survival. She is also the manager of the microscopy facility which provides state-of-the-art optical imaging technologies that allow researchers to obtain information on the impact of pathologies on cellular organization and structure.



ERIC CHANG, PhD
Psychiatric Neuroscience

Dr. Chang examines the impact of schizophrenia risk genes to identify causal associations between genomic variation and the symptoms of schizophrenia.



WAYNE (WENREN) CHAUNG
Immunology and Inflammation

Dr. Chaung’s research looks to develop therapies to prevent septic onset and progression. His work is looking at several potential drug candidates for the treatment of sepsis and other organ injuries including hemorrhagic shock, acute kidney injury, ischemia-reperfusion injury, stroke and radiation injury.



SANGEETA S. CHAVAN, MD
Biomedical Science

Dr. Chavan’s research focuses on bioelectronic medicine, and developing knowledge about the neuroanatomical pathways and neural codes in the vagus nerve that underlie its regulation of the immune response. She also works to develop targeted therapeutics for the treatment of long-term effects of inflammatory diseases.



KIT CHENG, MD
Oncology Research,
Patient-Oriented Research

Dr. Cheng’s research focuses on breast and GYN oncology.



NICHOLAS CHIORAZZI, MD
Oncology Research

Dr. Chiorazzi studies the activation and maturation of B-lymphocytes and uses this information to develop and test new diagnostics and treatments for patients suffering from chronic lymphocytic leukemia (CLL), a B-lymphocyte cancer residing in the blood, bone marrow and lymphoid tissues. His studies have impacted CLL patient prognosis and care.



CHAMPA CODIPILLY, PhD
Patient-Oriented Research

Dr. Codipilly’s research is investigating transformation patterns of gut microflora in premature infants as a function of diet aimed at understanding and preventing infantile necrotizing enterocolitis (NEC) — a serious gastrointestinal disease of unknown etiology and a major cause of morbidity and mortality in preterm infants.



JESSICA COHEN, MD
Patient-Oriented Research

Dr. Cohen’s research focuses on anticoagulation, rapid reversal of anticoagulants and protocol development for inpatient anticoagulation.



DANIEL COLETTI, PhD
Psychiatric Neuroscience

Dr. Coletti’s research focuses on patient adherence to medical recommendations, in particular decisions they make about taking medication.



JOSEPH CONIGLIARO, MD, MPH
Patient-Oriented Research

Dr. Conigliaro’s research focuses on the evaluation of provider behavior change, brief interventions to reduce hazardous drinking using computer interfaces, health care disparities, and implementation of best practices.



GENE COPPA, MD
Immunology and Inflammation

Dr. Coppa's research focuses on surgery and surgical techniques.



BARBARA A. CORNBLATT, PhD
Psychiatric Neuroscience

Dr. Cornblatt's research focuses on the early identification and treatment of adolescents and young adults who are considered to be at risk for developing serious psychiatric illness as adults, especially schizophrenia and other psychotic disorders. She directs the Recognition and Prevention (RAP) program.



CHRISTOPH U. CORRELL, MD
Psychiatric Neuroscience

Dr. Correll's research and clinical work focuses on the identification, characterization and psychopharmacological management of adults and youth with severe psychiatric disorders. His areas of expertise include schizophrenia, bipolar disorder, major depression and other psychotic, mood and autism/disruptive behavior spectrum disorders.



PETER COSTANTINO, MD
Patient-Oriented Research

Dr. Costantino's research focuses on the development of new biomaterials and surgical techniques to replace the facial skeleton and soft tissue, enhancing the ability of surgeons to restore patients to their presurgical appearance and function.



JAMES CRAWFORD, MD, PhD
Patient-Oriented Research

Dr. Crawford's research focuses on advancing the role of pathology and the clinical laboratory in the effective delivery of health care. This includes effective utilization and interpretation of laboratory testing, the use of laboratory data to manage patient populations and determining the efficacy of the clinical management of patients as driven by critical laboratory values.



CRISTINA D'ABRAMO, PhD
Alzheimer's Disease and Memory Disorders

Dr. D'Abramo's research focuses on Alzheimer's disease and studies tau and amyloid precursor proteins (APP) as early biomarkers of the disease, and to track the condition during pharmacological treatments.



JOHN D'ANGELO, MD
Patient-Oriented Research

Dr. D'Angelo's research focuses on identifying the signs of sepsis and developing sepsis treatment protocols.



ANNE DAVIDSON, MBBS
Autoimmune and Musculoskeletal Disease

Dr. Davidson's current research interests are focused on pathogenesis and therapy of lupus. Her lab's first goal is to understand more about the regulation of autoantibody-producing B cells and to use newly-discovered pathways of immune activation to design and test novel therapies for lupus.



PETER DAVIES, PhD
Alzheimer's Disease and
Memory Disorders

The major goal of Dr. Davies' research is to improve the understanding of Alzheimer's disease to allow for the discovery, development and testing of effective therapies. Recent work focuses on activation of cell cycle mechanisms in Alzheimer's disease and modifications of the microtubule associated protein tau as a reporter for signal transduction in the human brain.



KRISTINA DELIGIANNIDIS, MD
Psychiatric Neuroscience

Dr. Deligiannidis' research focuses on psychoneuroendocrinology and neuroendocrine biomarkers of depression in women during peripartum period; gender differences in depressions and treatment response; and complementary and alternative/integrative treatments.



CLIFFORD S. DEUTSCHMAN, MD
Biomedical Science

Dr. Deutschman's research focuses on sepsis. He has recently become involved in some aspects of epidemiology, care delivery and health service responses in patients with sepsis.



CRAIG DEVOE, MD
Oncology Research,
Patient-Oriented Research

Dr. DeVoe's research focuses on identifying and testing innovative treatments for cancer including immunotherapies.



VIJAY DHAWAN, PhD
Neuroscience

Dr. Dhawan's research focuses on how biophysics and bioengineering can be applied to neuroscience, and particularly to the study of disease mechanisms in movement disorders and other neurodegenerative conditions.



BETTY DIAMOND, MD
Autoimmune and
Musculoskeletal Disease

Dr. Diamond studies the induction and pathogenicity of DNA-reactive antibodies in lupus. These studies are designed to provide new strategies to prevent autoimmunity or protect against tissue damage in lupus. She also studies the contribution of maternal antibody to abnormal brain development.



JOHN DICAPUA, MD
Patient-Oriented Research

Dr. DiCapua's research focuses on pain management issues and perioperative operational management and clinical staffing models.



MICHAEL DIEFENBACH, PhD
Patient-Oriented Research

Dr. Diefenbach's research focuses on cognitive and affective factors as they relate to health behaviors and decision-making. He is translating these basic findings into patient-centered interventions, with the goal to improve patient adjustment to disease and treatment and quality of life.



DAVID EIDELBERG, MD
Neuroscience

Dr. Eidelberg directs an imaging research program in brain disease. His program has developed novel imaging techniques to characterize and quantify neural circuits in neurodegenerative disorders and to study their modulation by using functional imaging with PET and fMRI. This approach has provided unique insights into Parkinson's disease and related movement disorders.



DEBORAH ELKIS-ABUHOFF, PhD
Neuroscience

Dr. Elkis-Abuhoff's research interests bring together behavioral medicine and creative/medical art therapy with neuroscience. Her recent research projects connect art therapy with those diagnosed with Parkinson's disease, cancer and connecting the creative process to neurological responses.



BRUCE FARBER, MD
Patient-Oriented Research

Dr. Farber's research focuses on the treatment and prevention of infectious diseases.



ANDREW S. FEIGIN, MD
Neuroscience

Dr. Feigin directs the Laboratory of Experimental Therapeutics for Movement Disorders, which conducts clinical trials of new therapies for Parkinson's disease, Huntington's disease and other movement disorders. Dr. Feigin is particularly interested in utilizing PET imaging methods as a biomarker for neurodegenerative disorders in the preclinical phase of illness.



STEVEN FISHBANE, MD
Patient-Oriented Research

Dr. Fishbane's research focuses on hyperkalemia management, complications of kidney disease, inflammation in kidney disease, quality management in kidney disease anemia and iron management; and outcomes of kidney disease.



JOANNA FISHBEIN, MPH
Patient-Oriented Research

Ms. Fishbein is a biostatistician with a research focus on identifying and evaluating a set of short-term renal measurements that predict long-term responses for use in future lupus nephritis clinical trials.



GIOVANNI FRANCHIN, MD, PhD
Autoimmune and Musculoskeletal Disease

Dr. Franchin's recent focus is on clinical research and patient care. He is interested in lupus and rheumatoid arthritis, and is involved with clinical trials looking at new therapeutic targets for these diseases. He is also investigating the link between metabolism and disease activity in patients with lupus.



YUN FREUDENBERG-HUA, MD
Autoimmune and Musculoskeletal Disease

Dr. Freudenberg-Hua's research focuses on psychiatry and geriatric psychiatry.



RICHARD A. FURIE, MD
Autoimmune and
Musculoskeletal Disease

The goal of Dr. Furie’s research is to investigate the signaling pathways in myeloproliferative diseases — a group of conditions that cause blood cells to grow abnormally in the bone marrow — over the course of the disease. Understanding these mechanisms could allow for the development of more efficacious and better-targeted therapies.



AMIT GARG, MD
Patient-Oriented Research

Dr. Garg’s research focuses on developing instruments and assessing clinical and patient-centered outcomes in psoriasis. He has also developed innovative teaching strategies to improve training and education outcomes. Dr. Garg’s recent research has centered on improving teaching and assessment methods in undergraduate and graduate medical education.



SLEIMAN GHORAYEB, PhD
Immunology and Inflammation

Dr. Ghorayeb’s research includes diagnostic and therapeutic ultrasound in orthopaedics, dentistry, ophthalmology, urology and obstetrics and gynecology. Projects include assessment of osteoporosis; dental pulp stem cells; penile, testicular and cervical tissue characterization; retinal reattachment; and evaluation of cartilage implanted with preconditioned scaffolds.



TERRY E. GOLDBERG, PhD
Alzheimer’s Disease and
Memory Disorders

Dr. Goldberg is designing the next generation of neurocognitive assessments for patients with psychiatric disease. These tests will be used to diagnose and follow patients over time to see whether the treatments help in improving symptoms.



MARC L. GORDON, MD
Alzheimer’s Disease and
Memory Disorders

Dr. Gordon’s research focuses on behavioral neurology and neuropsychiatry. He leads clinical research studies in Alzheimer’s disease, mild cognitive impairment and vascular dementia. His current research involves clinical trials of novel medications, biomarker studies and imaging techniques.



DANIEL A. GRANDE, PhD
Bioelectronic Medicine

Dr. Grande’s research aims to improve treatments for injuries of the musculoskeletal system, including cartilage regeneration and repair, meniscus repair, tendon repair and bone fracture augmentation and fusion. Recent focus has been on developing novel cell-modified scaffolds for enhancing tendon repair and methods to provide gene therapy and tissue-engineered constructs for bone injuries.



HARLY GREENBERG, MD
Patient-Oriented Research

Dr. Greenberg’s educational and research efforts are in the field of sleep medicine. Recent work has focused on the cardiovascular pathophysiology of sleep apnea and intermittent hypoxia, assessing functional outcomes of sleep apnea therapy and on developing novel diagnostic and screening modalities for sleep-disordered breathing.



BLAINE GREENWALD, MD
Patient-Oriented Research

Dr. Greenwald’s research focuses on geriatric mental health.



PETER K. GREGERSEN, MD
Genomics and Human Genetics

Dr. Gregersen conducts international collaboration efforts to achieve a comprehensive genetic description for autoimmune diseases, with a particular focus on lupus and rheumatoid arthritis. He also studies a number of newly defined risk genes for autoimmunity, several of which are potential targets of new drugs.



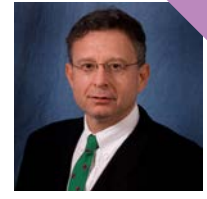
NEGIN HAJIZADEH MD, PhD
Patient-Oriented Research

Dr. Hajizadeh's research focuses on improving end-of-life care in patients with advanced chronic disease, by informing decision-making with prognostic data and effective doctor-patient communication in advance of critical illness.



TOBI HARRIS, MD, PhD
Patient-Oriented Research

Dr. Harris' research focuses on diabetes mellitus, medication adherence in patients with diabetes, obesity and endocrine complications of iron overload.



ALAN HARTMAN, MD
Patient-Oriented Research

Dr. Hartman's research focuses on aortic aneurysm, pulmonary embolectomy, valve repair, minimally invasive surgery, coronary bypass surgery and mechanical assist devices.



MARTA HAUSER, PhD
Psychiatric Neuroscience

Dr. Hauser is a clinical psychologist and researches schizophrenia and affective disorders, with a focus on early recognition and intervention in bipolar and psychosis-spectrum disorders.



BRUCE HIRSCH, MD
Patient-Oriented Research

Dr. Hirsch's research focuses on the role of the gut microbiome in health and disease.



GLORIA Y.F. HO, PhD
Patient-Oriented Research

Dr. Ho's research examines the potential of circulating microRNA and circulating tumor DNA as early detection and prognostic biomarkers for cancers.



PATRICIO T. HUERTA, PhD
Autoimmune and Musculoskeletal Disease

Dr. Huerta is interested in exploring the interactions between the nervous system and the immune system in health and disease. He currently studies brain abnormalities occurring in lupus and sepsis-induced long-term cognitive deficit, with the goal to isolate key immune and neural mechanisms with the purpose of creating therapies for autoimmunity and brain disorders.



JARED M. HUSTON, MD
Biomedical Science

The focus of Dr. Huston’s research is to understand how the central nervous system maintains homeostasis and protects against traumatic injury. He is currently studying the beneficial effects of vagus nerve stimulation with the hope that it can improve care of traumatized patients.



TOCHI IROKU-MALIZE, MD, MPH
Patient-Oriented Research

Dr. Iroku-Malize’s research focuses on clinical medicine, public health, health care systems and academic medicine.



ARTEMIO JONGCO III, MPH, MD, PhD, FACP, FAAAAI, FACAAI
Patient-Oriented Research

Dr. Jongco’s research focuses on expanding newborn screening to include primary immunodeficiencies, which includes close collaboration with the NYS Department of Health’s newborn screening program to develop and optimize multiplex assays to detect infants with T and/or B cell lymphopenia shortly after birth, using existing infrastructure.



VIVIAN KAFANTARIS, MD
Psychiatric Neuroscience

Dr. Kafantaris’ main research focuses on the pharmacological treatment of bipolar disorder and the related area of severe dysregulated aggression associated with conduct disorder or oppositional defiant disorder. She currently studies the neurodevelopmental underpinnings of bipolar disorder and treatment with lithium.



JOHN M. KANE, MD
Psychiatric Neuroscience

Dr. Kane’s research focus is in the field of schizophrenia research. His work has centered on improving the early diagnosis and treatment of schizophrenia, as well as developing new treatments and treatment strategies to enhance patient long-term effectiveness and quality of life.



BARRY KAPLAN, MD
Patient-Oriented Research

Dr. Kaplan’s research focuses on specialized inpatient care for cardiovascular patients.



COREY KARLIN-ZYSMAN MD, MPH
Patient-Oriented Research

Dr. Karlin-Zysman’s research focuses on hospital medicine co-management, medicine in inpatient psychiatry and unit-based care models.



STANLEY KATZ, MD
Patient-Oriented Research

Dr. Katz’s research focuses on intervention and acute myocardial infarction.



ELENA KATZAP, DO
Patient-Oriented Research,
Oncology Research

Dr. Katzap is an attending physician with the Division of Rheumatology, and she is involved in many clinical trials relating to osteoarthritis as well as other autoimmune diseases.



LOUIS R. KAVOUSSI, MD
Patient-Oriented Research

Dr. Kavoussi is dedicated to the treatment of urological disease through innovative surgical procedures, diagnostics and medical care.



JUNHWAN KIM, PhD
Immunology and Inflammation

Dr. Kim's research background is in synthetic chemistry, analytical biochemistry and mitochondrial physiology. His research interests are focused on understanding the role that mitochondria and lipids play for ischemia/reperfusion injury in cardiac arrest and the translation of these findings into clinical practice.



SUN JUNG KIM, PhD
Autoimmune and
Musculoskeletal Disease

Dr. Kim's research focus is to identify the regulatory mechanism of inflammatory function of dendritic cells and to understand the molecular mechanisms underlying inhibition of development of autoimmune diseases, particularly in lupus and inflammatory bowel diseases.



DARCY KING, PhD
Patient-Oriented Research

Dr. King's research focuses on developing solutions geared towards addressing the changing patient-centric business needs of pharma and health care organizations.



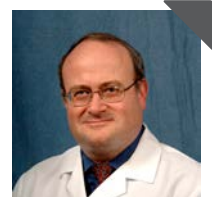
MYRIAM KLINE, PhD
Patient-Oriented Research

Dr. Kline is a biostatistician with a focus on psychometrics, multivariate modeling, survival analysis, and nonparametric methods.



NINA KOHN, MBA, MA
Patient-Oriented Research

Nina Kohn is a biostatistician with a focus on analysis of longitudinal data, including missing data or data collected at irregular intervals, non-parametric and exact methods, statistical graphics, and the design of clinical trials.



JONATHAN E. KOLITZ, MD
Oncology Research

Dr. Kolitz is an oncologist with a specialty in hematologic malignancies at Northwell Health's Monter Cancer Center.



JEREMY KOPPEL, MD
Psychiatric Neuroscience

Dr. Koppel’s research program focuses on elucidating the biology of behavioral disturbances in Alzheimer’s disease and the development of novel treatments. Recent work has focused on the endocannabinoid system in Alzheimer’s disease and the contribution of abnormal tau protein deposition to the development of psychotic symptoms.



CZESLAWA KOWAL, PhD
Autoimmune and Musculoskeletal Disease

Dr. Kowal’s research focuses on the mechanisms of the antibody-mediated neuronal abnormalities leading to brain pathology and to hormonal serum alterations in lupus. Projects include the function of the blood-brain barrier in the antibody-mediated pathology of the adult brain and of the maternal antibody-mediated abnormalities in the developing brain.



ANDRZEJ KOZIKOWSKI, PhD
Patient-Oriented Research

Dr. Kozikowski’s research focuses on developing, adapting and investigating effectiveness of theory-based telehealth interventions on clinical and patient-centered outcomes for patients with chronic conditions including type 2 diabetes, heart failure and chronic obstructive pulmonary disease.



JOSHUA LAMPE, PhD
Neuroscience

Dr. Lampe’s work focuses on the acute resuscitation of dying and critically sick patients to develop new treatments, advanced biosensors, and to increase our understanding of ischemia/reperfusion physiology.



XIQIAN LAN, PhD
Immunology and Inflammation

Dr. Lan’s research focuses on the effect of the APOL1 gene on the health of African Americans.



LEWIS LANE, MD
Patient-Oriented Research

Dr. Lane is an orthopaedic surgeon with a specialty in surgery of the hand and focuses his research on tendon healing.



DAVID J. LANGER, MD
Neuroscience

Dr. Langer has focused his clinical attention on diseases of the brain vessels, including cerebral revascularization and cerebral aneurysms.



ANNETTE T. LEE, PhD
Genomics and Human Genetics

Dr. Lee’s current research focus is to discover and validate new biomarkers for early detection, prediction of disease course and outcome and treatment response in cancer, particularly breast and ovarian cancers.



TODD LENCZ, PhD
Psychiatric Neuroscience

Dr. Lencz researches the use of biomarkers, especially novel genetic technologies, to better understand the causes and treatment of schizophrenia. He develops and implements strategies for identifying relationships between genetic variation and psychiatric disease, and examines the role that schizophrenia risk genes play in brain structure, function and development.



MARTIN L. LESSER, PhD
Patient-Oriented Research

Dr. Lesser is a biostatistician and assists investigators in data analysis, research question formulation, study design, data management, storage and retrieval, as well as publication preparation and patient safety and data quality monitoring.



JACOB LEVINE, PhD
Biomedical Science

Dr. Levine's research focuses on vagus nerve stimulation as a bioelectronic medical intervention for chronic inflammatory disease. Current projects include preclinical and clinical studies in rheumatoid arthritis, Crohn's disease and multiple sclerosis.



DIANE LEWIS HOROWITZ, MD
Patient-Oriented Research

Dr. Lewis Horowitz's research focuses on rheumatology, studying novel therapeutics for rheumatoid arthritis, medical decision-making, rheumatoid arthritis therapeutic use, shared decision-making and bone health in rheumatoid arthritis.



CHUNYAN LI, PhD
Bioelectronic Medicine

Dr. Li's research focuses on monitoring and treating the injured brain. Projects include developing the next generation brain multimodality monitoring devices using BioMEMS technology, and investigating trigeminal nerve stimulation as a novel therapeutic approach to traumatic brain injury by the activation of endogenous neuroprotective mechanisms.



WEI LI, MD, PhD
Biomedical Science

Dr. Li's research focus is to uncover the mechanisms underlying the pathogenesis of human inflammatory diseases like sepsis.



WENTIAN LI, PhD
Genomics and Human Genetics

Dr. Li is a bioinformatician with a focus on assessing, analyzing and annotating biomedical data to aid biologists in their study, and to generate theoretical hypotheses on biological phenomena and human disease.



HAIXIANG (HUDSON) LIANG, MD
Oncology Research

Dr. Liang's research focuses on tissue engineering studies for the repair of the musculoskeletal system.



TARA LIBERMAN, DO
Patient-Oriented Research

Dr. Liberman’s research focuses on goals of care in the advanced illness population. Her current endeavors include hospice evaluation in emergency medical rooms and transitions of care, as well as the integration of geriatric-trained social workers into the emergency room setting to improve available resources for the treatment of older adults.



JEFFREY M. LIPTON, MD, PhD
Autoimmune and Musculoskeletal Disease

The goal of Dr. Lipton’s research is the elucidation of the genetics and pathophysiology of Diamond-Blackfan anemia (DBA), a disorder of the bone marrow. He is working with numerous collaborators to develop genotype-phenotype correlations, resulting in the discovery of a number of DBA genotypes.



JOHNSON LIU, MD
Oncology Research

Dr. Liu’s research focuses on the molecular basis of hematopoietic stem cell disorders, collectively referred to as the inherited bone marrow failure syndromes. His current research is aimed at understanding the molecular pathophysiology of Diamond-Blackfan anemia (DBA) and Shwachman-Diamond syndrome. His lab also researches erythropoiesis and sickle cell anemia.



SHU FANG LIU, PhD
Immunology and Inflammation

Dr. Liu’s laboratory focuses on molecular mechanisms of septic shock and septic multiple organ injury (MOI).



YILONG MA, PhD
Neuroscience

Dr. Ma’s research focuses on the development, implementation and validation of innovative solutions in multimodality brain imaging applications with PET and MRI to study different neurodegenerative and neuropsychiatric disorders such as Parkinson’s disease and Huntington’s disease.



MEGGAN MACKAY, MD
Autoimmune and Musculoskeletal Disease

Dr. Mackay is a rheumatologist whose primary interests are in lupus, rheumatoid arthritis, scleroderma and vasculitis. She is a co-director of the Clinical Trials Unit and conducts studies to better understand and develop treatments for autoimmune disease.



ANIL MALHOTRA, MD
Psychiatric Neuroscience

Dr. Malhotra works on identifying the biological underpinnings of schizophrenia and determining how antipsychotic drugs work to quell the symptoms of the disease. His group assesses genes and neural circuits associated with increased risk for schizophrenia with the goal of developing more effective treatments.



PRASHANT MALHOTRA, MD
Patient-Oriented Research

Dr. Malhotra’s research focuses on respiratory viral infections and impact of respiratory panel on antibiotic use and length of stay, analysis of pleural fluid by genome sequencing in empyema, clinical prediction rules for pulmonary tuberculosis and early markers for sepsis in patients with intracranial hemorrhage.



PHILIPPE MARAMBAUD, PhD
Alzheimer's Disease and
Memory Disorders

Dr. Marambaud's research focuses on the molecular basis of neuronal degeneration in Alzheimer's disease and other dementias. His laboratory studies the early biochemical changes leading to the formation of two classic lesions of the Alzheimer's disease brain: the senile plaques and the neurofibrillary tangles.



GALINA MARDER, MD
Patient-Oriented Research

Dr. Marder's research focuses on rheumatology, inflammatory muscle disease, vasculitis and systemic lupus erythematosus.



ANNA MATHEW, MD, MPH
Patient-Oriented Research

Dr. Mathew's research focuses on clinical outcomes of patients with kidney disease and on dialysis. She conducts epidemiologic studies and uses that data to design and test evidence-based clinical interventions that can reduce readmissions for patients with kidney disease who are on dialysis.



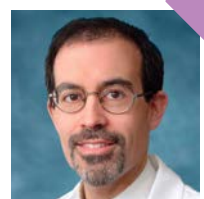
PAUL J. MATTIS, PhD, ABPP-CN
Neuroscience

Dr. Mattis' research focuses on the relationship between cognition and brain functioning.



THOMAS MCGINN, MD
Patient-Oriented Research

Dr. McGinn has taught, researched and worked in the area of academic general internal medicine with a focus on providing high-quality health care in urban communities. Recent areas of focus include the validation of clinical prediction rules, as well as the prevalence, risk factors and treatment of hepatitis C.



JOSEPH MCGOWAN, MD
Patient-Oriented Research

Dr. McGowan's research focuses on HIV and AIDS with a particular focus on HIV drug resistance, management of HIV in pregnancy, anal cancer screening in HIV and the role of alteration in the microbiota in HIV immune reconstitution.



ASHESH MEHTA, MD, PhD
Neuroscience

Dr. Mehta's lab uses multiple methods for measuring brain structure and function to advance understanding of human brain function and the treatment of epilepsy. The lab works to improve the diagnosis of epilepsy patients and better understand the root causes of epilepsy, and the physiological basis of brain structure, function and cognition.



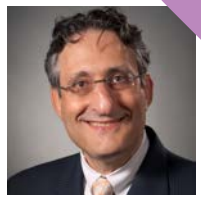
CHRISTINE METZ, PhD
Biomedical Science

Dr. Metz's research focuses on inflammation in both pregnant and non-pregnant populations and identifying ways to reduce and prevent dysfunctional inflammation. Much of her work centers on endothelial cells, which facilitate the rapid transport of blood and immune cells throughout the body, particularly to sites of infection and inflammation.



EDMUND MILLER, PhD
Patient-Oriented Research

Dr. Miller's research focuses on lung inflammation and the role of the lung as an inflammatory organ. The studies in his lab involve both acute and chronic disorders that impact the lung. He is closely studying the role of MIF in severe sepsis and pulmonary hypertension.



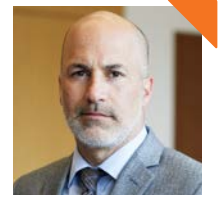
LARRY MILLER, MD
Patient-Oriented Research

Dr. Miller's research focuses on gastrointestinal physiology with a focus on sphincter mechanisms in the GI tract.



JACQUELINE MOLINE, MD
Patient-Oriented Research

Dr. Moline develops initiatives aimed at promoting and engaging health and wellness, and she oversees a population health and epidemiology research program. Her research interests include World Trade Center health effects, asbestos exposure, occupational lung disorders and heavy metal toxicity.



FREDRICK MUENCH, PhD
Psychiatric Neuroscience

Dr. Muench studies how to use technology to help individuals self-regulate in the face of day-to-day temptations. His research is focused on ecological momentary assessment, passive mobile sensing, physiological sensing and just-in-time adaptive interventions.



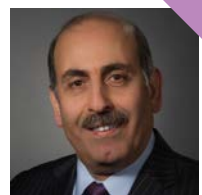
ALYSON MYERS, MD
Patient-Oriented Research

Dr. Meyers' research focuses on diabetes and depression, and understanding the pathophysiology of these two diseases and how they interact. She also examines metabolic syndrome in patients treated with antipsychotic medications, the effects of various medications on the metabolic profile of patients treated with antipsychotic medications and the use of telehealth in persons with diabetes.



JASON NAIDICH, MD, MBA
Alzheimer's Disease and Memory Disorders

Dr. Naidich's research focuses on health care policy, quality and noninvasive vascular imaging.



SOUHEL NAJJAR, MD
Patient-Oriented Research

Dr. Najjar's research focuses on epilepsy, neuroinflammation-related neuropsychiatric disorders and autoimmune disorders of central nervous system.



RAJ K. NARAYAN, MD
Bioelectronic Medicine

Dr. Narayan's research aims to develop the next generation of human monitoring devices, with a particular focus on the monitoring of the injured brain. His recent work has focused on the development of a "smart catheter" for the monitoring of multiple physiological parameters simultaneously with a single monitor.



MICHAEL NIMAROFF, MD
Patient-Oriented Research

Dr. Nimaroff is a gynecologist whose research focuses on developing noninvasive methods for gynecologic surgery.



CHRIS NOURYAN, PhD
Patient-Oriented Research

Dr. Nouryan's research focuses on developing telemedicine for CHF patients, chart reviews of all shapes and sizes, surveys on a variety of topics, and a breast cancer project which randomly assigns participants to see a geriatrician or receive usual care and follows their progress through the continuum of care.



MAHENDAR OCHANI, MD
Immunology and Inflammation

Dr. Ochani's research focuses on developing better therapies to prevent progression of organ injury and septic shock.



KAIE OJAMAA, PhD
Immunology and Inflammation

The goal of Dr. Ojamaa's research is to understand the causes of heart disease so that novel therapeutics can be developed. She studies inflammation and neuro-hormones during a heart attack, and why the heart often fails in the long term. In the newborn patient with congenital heart defects, her studies address how increased inflammation may affect neurodevelopment.



LARS PEDER S. OLOFSSON, MD, PhD
Biomedical Science

Dr. Olofsson studies biomedical science and how nerve reflexes regulate the body's defense to microorganisms and injury.



KENAN ONEL, MD, PhD
Genomics and Human Genetics

Dr. Onel's research focuses on the genetic contribution to cancer risk and response to therapy. His lab employs cutting-edge technology and develops novel methods to investigate the role of genetics in human health and disease. He then studies the genetic variants discovered in order to understand their consequences and develop therapies.



SHRESH PATHAK, PhD
Autoimmune and Musculoskeletal Disease

Dr. Pathak's research focuses on the molecular mechanisms of pro-inflammatory cytokines in peripheral blood immune cells from patients with immune mediated hearing loss.



DORU PAUL, MD
Oncology Research,
Patient-Oriented Research

Dr. Paul's research focuses on developing new targeted compounds that are more effective and less toxic than classic chemotherapeutic agents, palliative care and developing treatments for solid tumors.



VALENTIN A. PAVLOV, PhD
Biomedical Science

Dr. Pavlov's research focuses on the regulation of immune function and inflammation by the nervous system. He studies the role of brain and peripheral neuronal pathways in controlling cytokine responses and inflammation, and the therapeutic efficacy of cholinergic modalities in inflammatory and obesity-driven disorders and cancer-associated immune dysfunction.



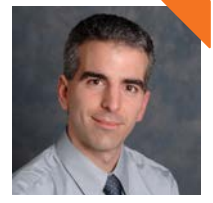
RENEE PEKMEZARIS, PhD
Patient-Oriented Research

With an emphasis on the growing population of seniors, Dr. Pekmezaris conducts community-based research investigations with seniors, including telehealth trials for patients living with congestive heart failure.



MARIECEL PILAPIL MD, MPH
Patient-Oriented Research

Dr. Pilapil's research focuses on young adults with special health care needs, particularly those with conditions originating in childhood. Her research focus is aimed at identifying opportunities to improve care of this patient population (including the importance of preventative care) and to increase provider comfort in caring for these patients.



ANTHONY PINTO, PhD
Psychiatric Neuroscience

Dr. Pinto conducts clinical research in obsessive compulsive disorder (OCD) and obsessive compulsive personality disorder (OCPD) and has an interest in maladaptive traits such as perfectionism and rigidity.



ELISABETH FLORAN, PhD
Autoimmune and Musculoskeletal Disease

Dr. Ploran's research focuses on investigating hippocampal and striatal contributions to spatial navigation and memory using fMRI, real-world navigation; the neural substrates of perceptual decisions, and amygdala function during fear discrimination.



LEONID PORETSKY, MD
Patient-Oriented Research

Dr. Poretsky's research focuses on clinical studies in diabetes and endocrinological aspects of HIV-infection. His current research interests include the effects of a recently discovered hormone, irisin, in the reproductive system, the potential role of Vitamin D in preventing type 2 diabetes; and developing clinical strategies to reduce readmission rates in patients with diabetes.



LOUIS POTTERS, MD
Oncology Research

Dr. Potters conducts research in prostate cancer, with a focus on prostate brachytherapy techniques and outcomes. He also works on systems and process research for high-quality and safe treatment of innovative care and delivery models.



JOSE PRINCE, MD
Autoimmune and Musculoskeletal Disease

Dr. Prince's research focuses on exploring the fundamental mechanisms involved in the immune response to trauma and organ injury.



TAM QUACH, PhD
Autoimmune and
Musculoskeletal Disease

Dr. Quach’s research focuses on human B cell biology and autoimmunity and understanding mechanisms that balance the pathogenic versus protective functions of different immune cells to develop new immunotherapies to chronic inflammation, degenerative diseases and cancer.



KANTI R. RAI, MD
Oncology Research

Dr. Rai collaborates in basic and clinical research to conduct a number of experimental drug trials for patients suffering from chronic lymphocytic leukemia (CLL), a cancer that resides in the blood, bone marrow and lymphoid tissues. His studies have impacted CLL patient prognosis and care.



KARIN RHODES, MD
Patient-Oriented Research

Dr. Rhodes’ research focuses on developing effective patient-centered responses to health-related social problems impacting individual and public health. Specifically, she has addressed policy-relevant questions around improving the value of an acute health care visit and use of patient-centered health IT as an opportunity for screening, brief intervention, and referral.



HORACIO RILO, MD
Immunology and Inflammation

Dr. Rilo’s expertise includes conducting clinical islet cell transplant for patients suffering from chronic pancreatitis and type 1 diabetes, and performing immunotherapy for pancreatic cancer. His research focuses on mitigating transplant rejection, preservation of donor organs and development of stem cell therapies to treat life-threatening diseases.



DELBERT G. ROBINSON, MD
Psychiatric Neuroscience

Dr. Robinson and his first-episode schizophrenia research network, which includes sites across the country and in Canada, study pharmacotherapy for schizophrenia. The network is currently conducting the RAISE trial, which assesses psychosocial and pharmacological treatments for schizophrenia.



LISA ROSEN, SCM
Patient-Oriented Research

As a senior biostatistician in the Biostatistics Unit, Ms. Rosen ensures a research study is well designed to address research questions, apply appropriate statistical methodology and interpretations of results. Her statistical interest includes multilevel modeling, complex survey data and clinical prediction rules.



JESSE ROTH, MD
Biomedical Science

Dr. Roth’s research focuses on obesity and diabetes. Projects include devising earlier ways to diagnose and treat diabetes, understanding how excess body weight brings out diabetes, and uncovering how the microbiome, the microbes in the intestine of the host, influence the host’s food intake and body weight.



THOMAS L. ROTHSTEIN, MD, PhD
Oncology Research

Dr. Rothstein’s lab aims to clarify the role and function of B lymphocytes in health and disease. His focus is on human B1 cells, a unique B lymphocyte subset that produces “natural” antibody and regulates T-cell activity. Human B1 cells may be important in understanding and treating autoimmune diseases and degenerative diseases of aging.



ROSAMARIA RUGGIERI, PhD
Oncology Research

Dr. Ruggieri researches glioblastoma and medulloblastoma, the most common types of brain tumors in adults and children. She is working on the development of an inhibitor that could provide novel treatments for these types of tumors.



FRANCES SANTIAGO-SCHWARZ, PhD
Autoimmune and Musculoskeletal Disease

Dr. Santiago-Schwarz's research is concerned with the control of monocyte and dendritic cell development in normal and abnormal physiology as well as developing new therapeutic agents for autoimmune diseases. Current work focuses on disrupted cytokine and immunoreceptor networks affecting monocyte/dendritic cell activity, particularly in rheumatoid arthritis and lupus.



STEVEN SAVONA, MD
Oncology Research,
Patient-Oriented Research

Dr. Savona's research focuses on issues related to cancer, including tobacco dependency and smoking cessation, redeveloping life styles and physical activity levels after completion of chemotherapy, the prevention of infections in patients with impaired immunity and prevention of hot flashes in patients on hormonal therapy.



RICHARD J. SCHANLER, MD
Patient-Oriented Research

Dr. Schanler researches neonatal nutrition and critical inflammatory disorders of newborns. His nutritional and anti-inflammatory studies aim to provide better outcomes for infants in the neonatal intensive care unit.



CHARLES SCHLEIEN, MD
Patient-Oriented Research

Dr. Schleien researches cardiopulmonary resuscitation, including brain-blood flow, drug effects, metabolism and mechanics of CPR. Recently, his focus has been in pediatric CPR and hypothermia following cardiac arrest in children.



MICHAEL SCHULDER, MD
Oncology Research

Dr. Schulder investigates new methods of image guidance for neurosurgery, including the incorporation of functional MRI as well as intraoperative MRI.



REBECCA SCHWARTZ, PhD
Patient-Oriented Research

Dr. Schwartz's research focuses on the role of mental health and abuse on HIV-related outcomes and STI/HIV-risk, how natural disasters and other types of trauma impact mental health, and impact of lung cancer surgery on Quality of Life (QoL).



JULIE SCHWARTZMAN-MORRIS, MD
Patient-Oriented Research

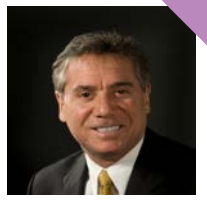
Dr. Schwartzman-Morris' research focuses on rheumatology, psoriatic arthritis and, spondyloarthritis and rheumatoid arthritis.



NAGASHREE SEETHARAMU, MD, MBBS

Oncology Research,
Patient-Oriented Research

Dr. Seetharamu’s research focuses on predictive and prognostic biomarkers in lung and head/neck cancers, immunooncology, and precision medicine.



NICHOLAS SGAGLIONE, MD

Patient-Oriented Research

Dr. Sgaglione’s research focuses on arthroscopy, minimally invasive surgery and knee, shoulder and cartilage surgery.



KEITH M. SHAFRITZ, PhD

Psychiatric Neuroscience

Dr. Shafritz’s research examines the neural and cognitive mechanisms of attention, executive function and emotion. He also studies psychological disorders that involve dysregulation of these processes, such as autism and attention deficit hyperactivity disorder. He works to determine the brain mechanisms underlying behavioral disorders so that future treatments can target those specific brain areas.



RAVI SHARAF, MD, MS

Oncology Research,
Patient-Oriented Research

Dr. Sharaf’s research focuses on clinical cancer genetics and the care of patients with hereditary gastrointestinal cancer syndromes.



RUBY SHARMA, MBBS

Oncology Research,
Patient-Oriented Research

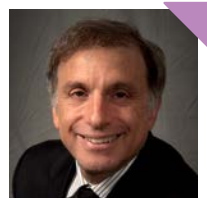
Dr. Sharma’s research focuses on the prevention of breast cancer, prevention of recurrence after surgery, and treatment of recurrences.



BARBARA SHERRY, PhD

Immunology and Inflammation

Dr. Sherry’s research interest is in the mechanisms that coordinate the innate immune response. Her ultimate goal is to gain a better understanding of the molecular mechanisms that regulate chemokine and chemokine receptor responses in healthy individuals, and to identify how these pathways are dysregulated in sepsis, HIV infection and chronic lymphocytic leukemia (CLL).



ROBERT A. SILVERMAN, MD

Patient-Oriented Research

Dr. Silverman researches pre-diabetes and diabetes in emergency room patients, as well as the effects of air pollution on asthma-related hospital admissions. He also studies air pollution and cardiac deaths that occur outside of the hospital.



KIM R. SIMPFENDORFER, PhD

Genomics and Human Genetics

Dr. Simpendorfer’s research focuses on the functional analysis of immune-related genes associated with lupus and rheumatoid arthritis.



HENRY SIMPKINS, MD, PhD
Patient-Oriented Research

Dr. Simpkins uses si/sh RNA knockdown techniques to study the molecular mechanisms of cisplatin resistance that develops in tumor cells. He is studying his area of medicine to create safer, more effective chemotherapies.



VARINDER SINGH, MD
Patient-Oriented Research

Dr. Singh's focus is on the quality and delivery of cardiovascular care.



PRAVIN C. SINGHAL, MD
Immunology and Inflammation

Dr. Singhal's research focuses on studying the mechanism of the progression of renal lesions in patients with HIV-associated nephropathy (HIVAN), a complication of AIDS. He also studies the effects of opiates and ethanol on T cell injury.



LIRON SINVANI, MD
Patient-Oriented Research

Dr. Sinvani's research focuses on geriatrics and aging research, improving quality of care of hospitalized older adults, the management of dementia and delirium in the hospital setting and models of inpatient care.



CRISTINA SISON, PhD
Patient-Oriented Research

Dr. Sison is a biostatistician with a focus on multinomial modeling, parametric bootstrap techniques, design and analysis of clinical trials, issues in diagnostic testing, regression modeling, and longitudinal analysis, among others. Her primary areas of application include cardiology, immunology, endocrinology, rheumatology, infectious diseases, radiology and anesthesiology.



SAMUEL Z. SOFFER, MD
Oncology Research

Dr. Soffer studies mechanisms of metastasis and resistance to anti-angiogenic therapies in pediatric soft tissue sarcomas. The goal is to prevent micro-metastatic disease following tumor resection in a host of pediatric solid tumors.



HARBALJIT 'HARBI' SINGH SOHAL, PhD
Bioelectronic Medicine

Dr. Sohal's research has concentrated on designing, manufacturing and implementing chronic, flexible implantable devices that could be used to treat disorders such as disability, brain disorders and immune disorders.



MYOUNGSUN SON, PhD
Autoimmune and Musculoskeletal Disease

Dr. Son's research focuses on a pathogenic pathway in lupus; specifically the fundamental tolerance role of complement C1q in the immune system. She studies the function of LAIR-1 and manipulating C1q and LAIR-1 for down-regulation of myeloid cells to improve the severity of lupus.



PHYLLIS W. SPEISER, MD
Patient-Oriented Research

Dr. Speiser's research focuses on congenital adrenal hyperplasia (CAH) and related disorders, as well as childhood growth, obesity and diabetes.



PHOEBE SPETSIERIS, PhD
Neuroscience

Dr. Spetsieris' research focuses on incorporating novel neuro-computational algorithms in a versatile software package for brain Scan Analysis and Visualization (ScAnVP) to study movement disorders such as Parkinson's Disease, Huntington's Disease and dystonia, as well as a wide range of other neurodegenerative functional brain conditions.



ALEX SPYROPOULOS, MD
Oncology Research

Dr. Spyropoulos studies the prevention and treatment of patients with venous thromboembolic disease, including pulmonary embolism, and has lead multiple international clinical trials in thromboembolic disease.



ADAM STEIN, MD
Patient-Oriented Research

Dr. Stein's research focuses on osteoporosis in spinal cord injury, management of spasticity and other aspects of the medical management of spinal cord disease.



BETTIE M. STEINBERG, PhD
Oncology Research

Dr. Steinberg's research is primarily focused on diseases of the airway caused by human papillomaviruses (HPVs). One of these diseases is recurrent respiratory papillomatosis (RRP). She also studies HPV-induced head and neck cancers.



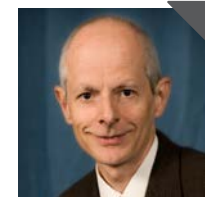
KEITH SCOTT SULTAN, MD
Patient-Oriented Research

Dr. Sultan's major research interests include inflammatory bowel disease (IBD), i.e. Crohn's disease and ulcerative colitis. He is the principal investigator on multiple investigator-initiated projects including those evaluating the relationship between IBD in different areas such as opiate pain medication usage, opiate use indications, venous thromboembolism, microbiome analysis, dual therapy, disparities, myocardial infarction, C.diff infection, and fatty liver.



ARUN SWAMINATH, MD
Patient-Oriented Research

Dr. Swaminath's areas of interest include diet in inflammatory bowel disease (IBD), determining cause of death in IBD patients using the city and state department of health database, studying the best treatments for IBD complicated by clostridium difficile, and management of iatrogenic injury in colitis patients.



MARC H. SYMONS, PhD
Oncology Research

Dr. Symons' research focuses on the molecular dissection of signaling pathways that are responsible for tumor cell invasion and survival, with current emphasis on brain tumors. The research examines two types of malignant tumors: glioblastoma and medulloblastoma.



ANTHONY SZEMA, MD
Patient-Oriented Research

Dr. Szema's research focuses on improving the diagnoses and treatment of various lung conditions.



ARUNABH TALWAR, MD
Patient-Oriented Research

Dr. Talwar studies translational research in pulmonary medicine with a focus on pulmonary hypertension and advanced lung disease. He also researches comorbidities of these diseases and their impact on patients' mental health and quality of life.



KEVIN J. TRACEY, MD
Biomedical Science

Dr. Tracey's research focuses on inflammation, the physiological and immunological response to infection and injury, and the mechanism by which neurons control the immune system. Most recently, he has made discoveries in bioelectronic medicine. Bioelectronic medicine tells nerves to produce the natural chemicals the body uses to treat itself.



JAMES TSANG, MPH
Patient-Oriented Research

Mr. Tsang develops web-based database driven applications that assist researchers in accomplishing their data management tasks for large-scale NIH funded multi-site clinical trials as well as smaller single-site studies.



IRA UDELL, MD
Patient-Oriented Research

Dr. Udell is an ophthalmologist with a research focus on corneal transplantation, DSAEK, ocular infections and ocular surface disorders.



OMOLARA UWEMEDIMO, MD, MPH
Patient-Oriented Research

Dr. Uwemedimo has served as a consultant for maternal and newborn health initiatives in Africa. Her current research focuses on evaluating interventions to improve the quality of child health services and ultimately, health outcomes for children living in sub-Saharan Africa.



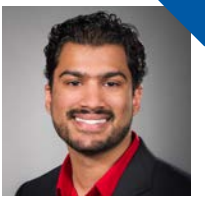
SARAH RIVKAH VAISELBUH, MD
Oncology Research

Dr. Vaiselbuh specializes in histiocytic disorders, pediatric leukemia and lymphoma and her research focuses on stem cell niche biology and the tumor microenvironment.



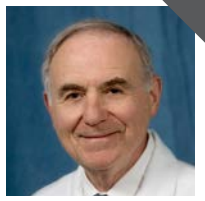
ANDREA VAMBUTAS, MD
Autoimmune and Musculoskeletal Disease

Dr. Vambutas's research interests are in the restoration of natural hearing in patients with immune-mediated hearing loss who are resistant to conventional corticosteroid therapy. She is currently studying how to prevent further hearing loss and identify new biologic markers in these patients.



ASHA VARGHESE, PhD
Immunology and Inflammation

Dr. Varghese's research focuses on the effects of alcohol in the brain and the healing process of skin wounds.



VINCENT VINCIGUERRA, MD
Oncology Research

Dr. Vinciguerra is an oncologist and active in clinical cancer research.



ADRIANNA VLACHOS, MD
Autoimmune and
Musculoskeletal Disease

Dr. Vlachos' research focuses on inherited bone marrow failure syndromes, particularly Diamond Blackfan anemia (DBA). Her goal is to better understand the epidemiology and biology of this red cell disorder, and ultimately discover better diagnostic and treatment options.



AN VO, PhD
Neuroscience

Dr. Vo's research focuses on developing imaging and analysis techniques for the study of human brain functions and structures with magnetic resonance imaging (MRI).



BRUCE T. VOLPE, MD
Biomedical Science

Dr. Volpe studies recovery after neurological injury with non-invasive technology, including interactive robot training and transcranial direct current stimulation (tDCS). His group is also exploring the effect of repetitive trans-cranial magnetic stimulation (rTMS) on brain metabolism using PET technology.



HAICHAO WANG, PhD
Biomedical Science

Dr. Wang's research is looking to uncover the mechanisms underlying the pathogenesis of inflammatory diseases, including cerebral ischemic injury and sepsis. He is working to identify novel therapeutic targets to fight against severe injury- and infection-elicited dysregulated inflammation.



JANICE WANG, MD
Patient-Oriented Research

Dr. Wang's research focuses on Cystic Fibrosis (CF), pharmaceutical research trials investigating new medicines targeting the abnormal CF Transmembrane Conductance Regulator protein responsible for the clinical manifestations of CF as well as antibiotic and airway clearance therapies for CF related lung disease.



JASON WANG, PhD
Patient-Oriented Research

Dr. Wang is a health economist, with extensive experience in health care, health equity, and health economics research. His research focuses on population health, quality improvement, clinical trials, cost-effectiveness analysis, decision models, electronic health record systems and related fields.



PING WANG, MD
Biomedical Science

Dr. Wang's research goal is to develop better therapies to prevent septic onset and progression. He and his team members are studying several potential drug candidates for the treatment of sepsis and other organ injuries including hemorrhagic shock, acute kidney injury, ischemia-reperfusion injury, stroke and radiation injury.



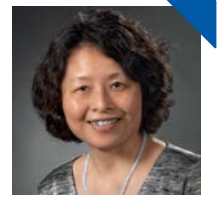
PAUL WRIGHT, MD
Patient-Oriented Research

Dr. Wright's research focuses on carotid artery disease and stroke.



XIAO YAN MD, PhD
Oncology Research

Dr. Yan's research focuses on the activation and maturation of B-lymphocytes in health and disease, in particular chronic lymphocytic leukemia (CLL).



HUAN YANG, MD, PhD
Biomedical Science

Dr. Yang studies the immune system and diseases caused by inflammation, with a focus on sepsis. Specifically, she studies the molecular basis of sepsis in order to develop an improved treatment for sepsis.



WENG-LANG YANG, PhD
Immunology and Inflammation

Dr. Yang's research focuses on studying cellular responses and molecular mechanisms that cause organ damage under various medical conditions, and on developing therapeutic interventions to attenuate these organ injuries.



THEODOROS P. ZANOS, PhD
Bioelectronic Medicine

Dr. Zanos' research interests span the areas of computational neuroscience, neuroengineering and neurophysiology. Recently, he has been working on projects involving neurostimulation that affect single neuron firing, intracortical oscillations, connectivity between brain areas, sensory processing, learning and behavior.



JIANPING ZHANG, MD, PhD
Psychiatric Neuroscience

Dr. Zhang's research goal is to improve treatment outcomes of patients with schizophrenia and other psychiatric disorders. Current research is focused on pharmacogenomics of antipsychotic drug response, using genomic markers to predict medication efficacy and side effects. He treats and studies patients with early stages of schizophrenia.



MENG ZHANG, PhD
Patient-Oriented Research

Dr. Zhang's research interests include multilevel modelling, longitudinal analysis, survival analysis, clinical trials, meta-analysis and machine learning. Currently, she conducts research linking US Census Bureau census-tract level socioeconomic data with patient level data simply by patient addresses, to identify risk factors at both levels for treatment outcomes.



XINHUA ZHU, MD

Oncology Research,
Patient-Oriented Research

Dr. Zhu's research focuses on identifying molecular biomarkers of cisplatin-based chemosensitivity for muscle-invasive bladder cancer, identifying novel targets for prostate cancer therapy as well as conducting clinical trials on therapies for metastatic breast, pancreatic and prostate cancers.



YONG-RUI ZOU, PhD

Immunology and Inflammation

Dr. Zou studies hematopoietic stem cell (HSC) function under normal and inflammatory conditions. Another current focus is on how inflammatory factors affect the bone marrow microenvironment and differentiation of stromal cells in lymphoid organs in autoimmune diseases.



A message from the Chair of the Board of Directors

Last year was one of the most progressive years in our history, with philanthropic support significantly helping to spearhead our ability to advance our research.

Barbara Hrbek Zucker
Chair, Board of Directors
The Feinstein Institute for Medical Research

Philanthropy is playing an increasing role in resourcing key research initiatives that are not only changing the face of medical research, but the fundamental way medicine is practiced. Consider the following:

- We received a leadership gift from Leonard and Susan Feinstein to further support our research efforts in areas including clinical trials, neuroscience, autoimmunity and bioelectronic medicine. The Feinstein's support of our vision will continue to have a significant multiplier effect on finding breakthrough solutions to the world's most pressing health care problems.
- The annual Feinstein Institute Summer Concert had a record-breaking year, raising \$2.4 million for research at Northwell Health.
- Thanks to philanthropic support, we launched the Center for Bioelectronic Medicine in January. This center will expedite the advancements being made in bioelectronic medicine to bring drug-free options to treat injury and illness.

We continue to attract the best and brightest researchers in the country — and the world — to join our outstanding physicians and scientists who are leading our work and reimagining how to treat illness and keep people well through technology and innovation.

Joining us in these vitally important endeavors are our generous philanthropists — individuals, corporations and foundations — who have invested in the Feinstein Institute's mission. Our committed donors are essential partners for our extraordinary staff who enable us to advance science to create inventive approaches to medicine.

As chair of the Feinstein Institute, I consider it an honor to be a partner of this organization. It is humbling to see people come together to advance the promising work taking place here and throughout Northwell Health.

With your continued support, we will sustain the excellence of the Feinstein Institute for years to come and will help raise not only our standard of health care but raise the standard of health care everywhere.



Board of Directors

Robert B. Catell

Anthony Cerami, PhD

Nicholas Chiorazzi, MD

Susan B. Claster

Steven M. Cohen

David E.R. Dangoor

Thomas J. Degnan, MD

Michael A. Epstein

Leonard Feinstein

Lloyd M. Goldman

Susan Karches

Curt N. Launer

Marjorie Boas Levins

Seth Lipsay

Nancy A. Marks

Charles Merinoff

Susan L. Merinoff

Edward D. Miller

Ralph A. Nappi

Peter J. Pappas, Jr

Lewis S. Ranieri

Scott Rechler

Jack J. Ross

Michael C. Slade

Kevin J. Tracey, MD

Barbara Hrbek Zucker



Ex-Officios

Mark L. Claster

Michael J. Dowling

Laurence Kraemer, ESQ

Brian T. Lally

Laura S. Peabody

Andrew Schulz

Robert S. Shapiro

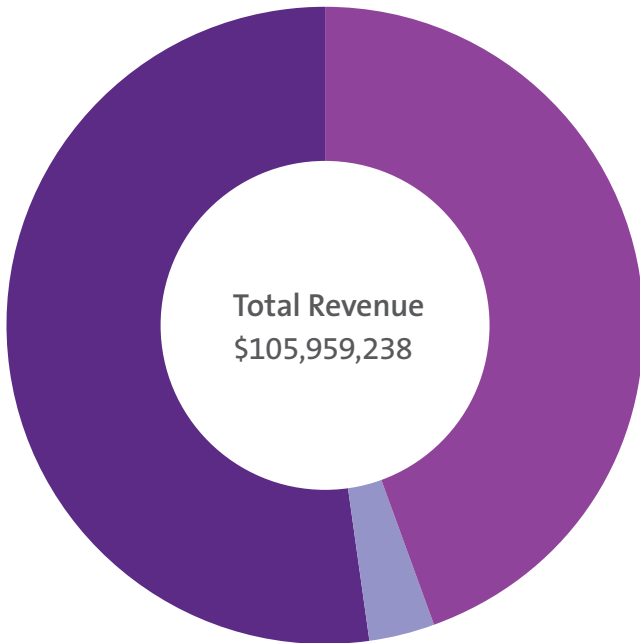
Bettie M. Steinberg, PhD

Andrew C. Yacht, MD, MSc, FACP

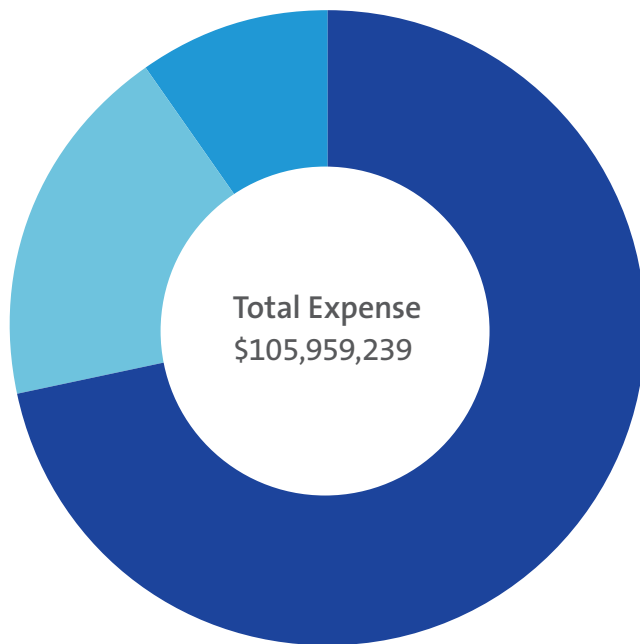


Financial summary

For the year ending December 31, 2016 (unaudited dollars)



| | |
|--|--------------|
| Grants | \$47,191,415 |
| Licensing, Royalties and Other | 3,470,356 |
| Philanthropy and Health System Support | 55,297,467 |



| | |
|---------------------------------|--------------|
| Research | \$75,960,326 |
| Administrative | 19,750,501 |
| Facilities and Capital Spending | 10,248,412 |

2016 Honor roll

Northwell Health is grateful for the continued support of so many friends. We wish to thank all of our donors whose generosity and ongoing partnership enable us to reimagine the world of health care and help us to take care of the communities we serve.

We make every effort to be accurate and complete in this donor listing. If you have any questions with regard to how your name and/or organization appears, please contact the Northwell Health Foundation at 516-321-6300.

The names listed below represent donors, corporations and foundations that have made cumulative gifts of \$2,500 or more in 2016. Symbols appearing next to listings reflect lifetime giving.

Note: the data presented in this section does not capture financial information from Phelps Memorial Hospital, Northern Westchester Hospital or Peconic Bay Medical Center.

- | | | | |
|---|---|------------------------------------|---|
| 16W Marketing, LLC | Aesthetic Plastic Surgery, P.C. ◆ | Altour International, Inc. | ASCAP ◆ |
| A & JC Management, LLC | AFCO Insurance Premium Finance | American Cancer Society ● | Mr. and Mrs. George Asch ◆ |
| Lorraine S. Aaron ◆ | Affiliated Adjustment Group, Ltd. | American International Group, Inc. | Ms. Margaret M. Ash |
| Aaronson Rappaport Feinstein & Deutsch, LLP ◆ | Aflac | Amerigroup Corporation | Mr. and Mrs. Michael L. Ashner ● |
| Mr. Arthur A. Abeles | Mr. Greg A. Agran ◆ | AML Consulting Services, Inc. | Dr. Stanley Asnis and Dr. Lisa Langer ◆ |
| Abilene, Inc. | Ainslie Foundation | Mr. and Mrs. Thomas Amodio | <i>Practice, LLC</i> |
| Dr. and Mrs. Shahrokh Abiri | Airline Vending Services, Inc. | Amster, Rothstein & Ebenstein, LLP | ASR Electric |
| <i>76 North Realty Co, LLC</i> | Air Serv Corporation ◆ | Mr. and Mrs. Arthur A. Anderman ▲ | Drs. Donna and Mark Astiz |
| Mr. and Mrs. Michael Aboff ◆ | Airway Maintenance, LLC | Anderson Family Charitable Trust ● | Atalie's Hope, Inc. |
| <i>Aboff's Inc</i> | Mr. and Mrs. Joseph A. Alagna, Jr. | Mr. and Mrs. Jay I. Anderson | Atlas Property Services, Inc |
| Abrams, Fensterman, Fensterman, Eisman, Greenberg, Formato & Einiger, LLP | Mona Fishman Albert and Andrew Albert ▲ | Ms. Christine Anderson-Vietri | Atria Senior Living ◆ |
| Mr. and Mrs. Richard S. Abramson ● | Mr. and Mrs. Wayne Albinder | Angels on the Bay, Inc. ◆ | Au Bon Pain |
| Louis and Anne Abrons Foundation, Inc. | Mr. and Mrs. Michael W. Alderman | The Anikstein Family ◆ | Augusiewicz Contracting, Inc. |
| Mr. and Mrs. William Achenbaum ● | Mr. and Mrs. John W. Alexander ◆ | Anonymous | Auxiliary of North Shore University Hospital ■ |
| Mr. Roger E. Acker | All County Equipment Rental | Dr. and Mrs. Parswa Ansari | Mr. and Mrs. Robert C. Avaltroni |
| Dr. and Mrs. Angelo Acquista ◆ | Mr. and Mrs. Harvey Allen | Mr. and Mrs. Nishan Apelian ● | AXA Equitable Life Insurance Company |
| Mr. Paul R. Ades ◆ | The AO Allenius Family Foundation, Inc | APEX Rehabilitation & Care Center | B-Sharp Musical Productions, Inc. |
| The Adikes Family Foundation ◆ | Alliance for Lupus Research ● | Apple & Eve, Inc. | Mr. and Mrs. Louis Bacon |
| Adria Infrastructure, LLC | Allied Aviation Services, Inc | Appliance World of Huntington | <i>The Moore Charitable Foundation, Inc.</i> |
| Advantage Title Agency, Inc. | Mr. and Mrs. Charles M. Alter | Ms. Pauline Arama-Olsten | Estate of Leo Baer |
| AdvantageCare Physicians | Mr. and Mrs. Philip S. Altheim ◆ | Dr. Brahim Ardolic | BAE Systems |
| | | Arizona Beverage | Natalie Bailey & Herbert J. Kirshner Foundation |
| | | Mr. Adam Aronson | Mr. and Mrs. Andrew D. Baker |
| | | | Dr. and Mrs. Sanjay Bakshi |
| | | | Mr. and Mrs. Thomas M. Bancroft ◆ |
| | | | <i>Norwood Foundation, Inc.</i> |
| | | | Banfi Vintners Foundation ▲ |
| | | | Bank of America, N.A. ◆ |
| | | | Mr. and Mrs. Vincent C. Banker ◆ |
| | | | Mr. Keith Banks |

Jeanine and Merrill Banks ◆
BankUnited
Mr. Michael Bapis
Mr. Paul Barbara
The Barbara Family Foundation, Inc.
Barbash Family Fund, Inc. ●
Mrs. Cathy Barbash ●
Mrs. Lillian Barbash ●
Mr. Shep Barbash ●
Mrs. Susan Barbash ●
Harbour Club, LLC
Mr. and Mrs. Christopher J. Barber ◆
Mr. and Mrs. Manuel H. Barron ●
Mr. and Mrs. Gerard M. Barsch
Mr. and Mrs. Stanley F. Barshay ◆
Mr. and Mrs. Ralph M. Baruch ●
Estate of Betty Baskin ◆
Mrs. Sandra Atlas Bass ★
Mr. David W. Baum ◆
Mr. and Mrs. Peter J. Baum
Mrs. Joanna Bayless and Mr. Allan Chasanoff
BCB Community Bank
Beautiful Mind Entertainment, Inc.
Mr. and Mrs. Charles M. Becker
Mr. Kevin S. Beiner
Mr. and Mrs. Steven Beldner
Dr. and Mrs. Alessandro G. Bellucci
Mr. John M. Bendheim, Sr. ■
Leon Lowenstein Foundation, Inc.
Mr. Gerald Benjamin
Mr. Al Berg and Dr. Gayle Berg ◆
Sol and Margaret Berger Foundation ●
Ms. Louise Bergstresser
Ms. Amy Berkery
The Berlin Family Foundation ◆
Mr. and Mrs. Sidney Berman
Mr. Martin W. Bernard ◆
Mr. and Mrs. Jay H. Bernstein ◆
Mr. and Mrs. Ed Berro
Mr. and Mrs. Robert Bertuglia
Mr. and Mrs. Frank J. Besignano
Bethpage Federal Credit Union ◆
Ms. Jennifer L. Bickhardt
Biener Auto Group, Inc.
Mr. Michael L. Bier
Mr. and Mrs. Joseph Bier
Dr. Fabien D. Bitan
Dr. Victoria B. Bjorklund and Mr. Hank Bjorklund
Mr. and Mrs. Barry L. Bloom
Bloomingdale's Fund of the Macy's Foundation ▲
Mr. Eric S. Blumencranz ▲
BWD Group, LLC
Mr. and Mrs. Roger A. Blumencranz ●
BWD Group, LLC
Mr. and Mrs. Edward Blumenfeld and Family ●
Mr. and Mrs. Andrew Boas ●
Mrs. Marjorie Boas Levins and Mr. Jack Levins ■
Dr. and Mrs. Richard S. Boas ●
Mr. and Mrs. John Bohlsen ■
Mr. and Mrs. Kurt Bohlsen
Bohlsen Restaurant Group
Mr. Michael Bohlsen
Bohlsen Restaurant Group
Mr. and Mrs. Geoffrey T. Boisi ▲
Mr. and Mrs. Joseph Bongiorno, III
ADJO Contracting Corporation
Dr. and Mrs. John A. Boockvar
Boston Scientific Corporation ▲
Botto Mechanical Corporation ◆
Brain and Behavior Research Foundation ●
Dr. Lenore Brancato and Dr. Louis Potters
Dr. and Mrs. Daniel J. Brandenstein
Norbert & Henry Bratt Charitable Trust
Mr. E. Steve Braun ★
Dr. and Mrs. Richard E. Braunstein
Drs. Linda and Steven Breskin
Mr. and Mrs. Fred Brettschneider
Bridgehampton National Bank
Bridle Estates, Inc.
Brillo-Sonnino Family Foundation
Brock Solutions
Mr. and Mrs. Bert E. Brodsky ▲
Alzheimer's Foundation of America
Mr. and Mrs. Chester F. Broman
Brooklyn Event Center
Brooklyn Media Group, Inc.
Estate of Florence Brooks Kressin ●
Mr. and Mrs. Robert Brooks
Mr. and Mrs. Dayton T. Brown, Jr. ●
Mr. Michael D. Brown
Atlantic Automotive Group
Mr. and Mrs. Bryan Brownyard
Estate of Mark Broxmeyer ●
Ms. Rebecca Broxmeyer
Estate of Michael S. Bruno ●
Bryan Cave, LLP
Mr. Ed Bryant
BTIG, LLC
Mr. Terry Burd
Burns & McDonnell Engineering Co., Inc.
Mrs. Claire C. Busching ◆
Cablevision/Lightpath ▲
Dr. Jean M. Cacciabauda and Dr. William A. Maiorino
Calamos Advisors, LLC
Mr. and Mrs. Salvatore Calcagno
Caldera Medical, Inc.
Cam Energy
Campizondo Foundation
Can't Live Without It, Inc.
Mr. and Mrs. William J. Candee, III
Mr. William J. Candee IV
Ann and Peter Cannell ◆
Capital Fund Management
Mr. and Mrs. Salvatore Capitano
Capstone Advisory Group, LLC
Ms. Lucinda M. Cardinal and Mr. Daniel S. Tamkin ◆
Cardiovascular Systems, Inc. ◆
CareRite Centers, LLC
Mr. and Mrs. Michael G. Caridi ◆
The Vincent Gruppuso Foundation
Mr. and Mrs. Joseph F. Carillo, Sr.
Carillon Nursing & Rehabilitation Center
Mr. and Mrs. Eric Carlstrom
Mr. and Mrs. Robert A. Carlstrom ◆
Carmel Richmond Nursing Home
Bonnie Cashin Fund
Dr. Miriam Caslow and Mr. Robert J. Caslow
Mr. and Mrs. Rosario S. Cassata

| | | | |
|--|---|---|---|
| Mr. and Mrs. Frank Castagna ● <i>Fifth Avenue of L.I. Realty Associates</i> | Citimedical I, PLLC | Mr. John Corrado <i>Suffolk Transportation Service, Inc.</i> | Dr. and Mrs. Marvin Dannenberg |
| Mr. and Mrs. Robert F. Castano | Mr. and Mrs. Robert Citrone | Costco Wholesale ● | Morris & Rose Danzig Charitable Trust ◆ |
| Mr. and Mrs. Robert B. Catell ● | Mr. and Mrs. Jerry Clair ▲ | Mr. and Mrs. Konstantine Costalas | Mr. and Mrs. Philippe P. Dauman ▲ |
| Centennial Elevator Industries, Inc. | Mr. Richard A. Clarke | Dr. and Mrs. Peter D. Costantino | Ms. Caroline A. Davis ▲ |
| Centerview Partners, LLC | Ms. Joan R. Cluster | Ms. Eileen V. Costello | Mr. Jason Davis |
| Central General Medical & Dental Staff ◆ | Mr. and Mrs. Mark L. Cluster ■ <i>Carl Marks Foundation, Inc.</i> | Pat Covelli Foundation | Mrs. Katherine M. Davis |
| Century Elevator Maintenance Corporation | Mr. Jose Claxton | Mr. Gordon J. Crane | The De Rosa Foundation for Colon Cancer Research and Prevention ◆ |
| The Anthony Cerami and Ann Dunne Foundation for World Health ● | CLL Global Research Foundation ◆ | Credit Union Miracle Day, Inc. | Mrs. Vincent de Roulet ● |
| Mr. Robert A. Certilman ◆ | CNA | Mr. and Mrs. Brad W. Cronin | Mr. C. Nathan Dee |
| Certilman Balin Adler & Hyman, LLP ◆ | Cohen Children's Circle ★ | Crosstex International, Inc. | Mr. and Mrs. Peter P. Dejana ◆ |
| Mr. and Mrs. Richard Chipman ◆ | Mrs. Gene W. Cohen | Ms. Margaret M. Crotty and Mr. Rory B. Riggs ◆ | Delco Drugs & Specialty Pharmacy, Inc. |
| Clifford Chance US, LLP | Mr. and Mrs. Ronald P. Cohen | Ellen and Daniel Crown ● | Deloitte Services, LP ▲ |
| Mr. and Mrs. Robert W. Chasanoff ● | Ms. Sharon J. Cohen ● | Dr. Eric S. Cruzen | Delta Air Lines ▲ |
| Mr. and Mrs. Jay Chazanoff | Mr. and Mrs. Steven A. Cohen ★ | Crystal & Company | Mr. and Mrs. Scott L. DeMatteis |
| Chelsea Floor Covering | Mr. and Mrs. Steven M. Cohen and Mrs. Bernice Cohen ● | Mrs. Marilyn F. Cunniff | Mr. and Mrs. Manfred E. Demenus |
| Mr. and Mrs. Edward A. Chernoff ◆ | Estate of Milton S. Cohn ● | Mr. and Mrs. Gerald J. Curtin | Mr. and Mrs. Daniel J. Denihan, Sr. |
| Chestnut Investors, LLC | Mr. and Mrs. John K. Colgate, Jr. ▲ | Michele and James Cusack | The Doris Denker Wheelchair Sports Foundation, Inc. |
| Mr. Frank Chiarello | Simon & Eve Colin Foundation, Inc. ▲ | Mr. and Mrs. Roderick H. Cushman ▲ | Dentons |
| Children's Medical Fund of New York ★ | Mr. and Mrs. Ronald Colleluori <i>GGG Construction Corporation</i> | Drs. Fred and Patricia Cushner | Deutsche Bank Americas Foundation |
| Children's Miracle Network Hospitals ■ | Community Foundation of Jackson Hole | Estate of Lorraine Cusick | Mr. and Mrs. Thomas E. Dewey, Jr. ▲ |
| Mr. Andrew Chonoles | Compass Group, North America | Cystic Fibrosis Foundation ▲ | S. Sydney DeYoung Foundation ◆ |
| Mr. and Mrs. Warren A. Christie ◆ | Estate of Gloria Slattery Confort ● | Drs. Catherine A. D'Agostino-Barakat and Richard R. Barakat | Drs. Hema and Kush Dholakia |
| The Christie Family Foundation | Estate of John Confort, Jr. | Mr. and Mrs. Ralph D'Ambrosio | Mr. Christopher D. DiBiase |
| Chubb Federal Insurance Company ◆ | Connecticut Sports Foundation Against Cancer, Inc. | Mr. and Mrs. Joseph F. D'Angelo ◆ <i>64th Street, LLC</i> | Mr. and Mrs. Vittorio B. DiGiorgio ◆ |
| Cigna Health and Life Insurance Company | Ms. Micheline Connery | Jillian E. Daly Foundation ◆ | DiGirolomo & Associates, PC |
| Circulatory Technology, Inc. ◆ | Mr. Dennis Connors | Damaghi Families ● <i>Farahnaz and Babak Damaghi</i> | Mr. Stephen J. DiLascio |
| Citigroup ◆ | Construction Resources Corporation of New York | <i>Haleh and Kambiz Damaghi</i> | Mr. and Mrs. Joseph DiMartino ◆ |
| | Mr. and Mrs. Michael P. Contillo | <i>Mitra and Nader Damaghi</i> | Dime Community Bank |
| | Mr. and Mrs. Robert Conzo | <i>Shahnaz and Nasser Damaghi</i> | Diopsys, Inc. |
| | Cook Maran & Associates, Inc. | Mr. and Mrs. David E. R. Dangoor | DiPaolo Foundation |
| | Corgan Associates Architects, PC | Daniel Gale MacCrate Real Estate, Inc. | Mr. Robert DiPierro |

Mr. and Mrs. Daniel F. Doman
Mr. and Mrs. Thomas E. Dooley ■
Barbara Dorsch Foundation
Mr. Joshua Dorsey
The Doscas Family Foundation, Inc.
Mr. and Mrs. Dennis Dowling
Mr. and Mrs. Michael J. Dowling
Robert N. and Nancy A. Downey ●
Mr. and Mrs. Michael J. Driscoll
Ms. Ruth A. Drucker ◆
The Eleanor, Adam and Mel Dubin Foundation
Ms. Helen Duryea
E.I.B. LMCC Fund
Eastern Energy Systems, Inc.
ECHO - Emergency Children's Help Organization ▲
Paul R. Eckna Memorial Foundation
Dr. and Mrs. Martin P. Edelstein
The Eger Foundation
Mr. and Mrs. Martin Eisenberg
Mr. and Mrs. Ronald Eisenberg
Mr. and Mrs. Saul Eisenberg ◆
The Charles L. Read Foundation
Mr. and Mrs. Warren Eisenberg ◆
Mr. and Mrs. Adam Elberg
Mr. and Mrs. Christopher Eler
Eleutherian Trust Company
Mr. Martin Elias ●
Ike, Molly & Steven Elias Foundation
Elite Airline Linen of New York, Inc.
Thomas and Jeanne Elmezzi Private Foundation ★
Empire Liver Foundation, Inc.
enCourage Kids Foundation ▲
Mr. and Mrs. Peter Engel ◆
Mr. and Mrs. Israel Englander ●

Ennead Architects, LLP
Mr. Robert Entenmann ■
Mr. Michael Epstein and Ms. Lisa Martin Epstein ●
Dr. and Mrs. Neal F. Epstein
Mr. and Mrs. Eric Erb
Mr. and Mrs. Scott Erlich
The Boomer Esiason Foundation ▲
Estate NY R.E. Services, LLC
The Estee Lauder Companies, Inc. ▲
Mr. and Mrs. Bernard Ettinger ◆
Evercore Partners Services East, LLC
Evercore Trust Company
Express Scripts, Inc.
Mr. and Mrs. Dean Facatselis
Faegre Baker Daniels, LLP
Mr. and Mrs. Peter M. Fahey ◆
Mr. and Mrs. Kostas Fakiris
Fan Fox and Leslie R. Samuels Foundation, Inc. ●
Mr. and Mrs. Peter D. Fante
Mr. and Mrs. Steven Farbman ◆
Farmingdale Iron Works, Inc.
Farrell Fritz, P.C. ◆
Fashion Accessories Benefit Ball
Estate of Margaret Faust
The Louis and Gertrude Feil Family ★
Drs. Sheryl and Randall Feingold
Ms. Amy Feinstein ◆
Florence Feinstein Memorial Fund
Mr. and Mrs. Jeffrey L. Feinstein ◆
Mr. and Mrs. Leonard Feinstein ★
Mr. and Mrs. Richard S. Feinstein ◆
Dr. Lenora I. Felderman

Mr. and Mrs. Michael E. Feldman ◆
Nicole and P.J. Felix
Mr. and Mrs. Larry Fenster
Fera Pharmaceuticals, LLC
The Ferriday Fund Charitable Trust
Mr. and Mrs. Richard Ferriggi
Mr. and Mrs. Fredric Fetkowitz
Kaymont Consolidated Industries, Inc.
Dr. and Mrs. Noah S. Finkel
Finkel Orthopedics, PLLC
Joel Finkelstein Cancer Foundation ★
Fire Island Ferries, Inc.
Fireman's Association of the State of New York ▲
The First National Bank of Long Island
Billy Fischer Pediatric Cancer Research Fund ◆
Mr. and Mrs. Daniel Fisher ◆
Five Star Carting, Inc.
Dr. and Mrs. Adiel Fleischer
Mr. and Mrs. Thomas J. Flynn ◆
Mr. and Mrs. Sidney Forbes
Mr. Michael Forrest
Forrest Partners, LLC
Dr. Jamie A. Fortunoff and Dr. Paul P. Romanello
Mr. and Mrs. Robert Fortunoff ◆
Foundation for Innovations in Medical Education
Foundation for Surgical Fellowships ◆
FragranceNet.com
Mrs. Margrit Franitza
Abraham B. & Sarah Frank Fund ▲
Franklin Hospital Medical Center ◆

Mr. and Mrs. Anthony M. Frascella
Mr. and Mrs. William H. Frazier ◆
The Frelinghuysen Foundation
Fresh Meadow Country Club ●
Mrs. Carolyn W. Fried
Dr. Ethan Fried and Mrs. Joan Bester
Mrs. Patricia Fried ◆
Fried, Frank, Harris, Shriver & Jacobson, LLP
Claire Friedlander Family Foundation
Friedman, LLP
Mr. Clifford H. Friedman ◆
The Gerald J. and Dorothy R. Friedman New York Foundation ★
Mrs. Joyce A. Friedman ◆
Friends and Angels: The Tracy Vicere Foundation, Inc.
Mr. Scott H. Frishman ◆
Philip J. Hahn Foundation
Mr. and Mrs. Robert L. Fromer ●
Estate of Bella Frutkin ◆
Mr. Alan J. Fumuso
Gabrielle's Angel Foundation for Cancer Research
Mr. and Mrs. Thomas J. Gahan ◆
Mr. Kenneth Gainer
Mr. Eugene K. Galbraith
Mr. Stanley C. Gale ▲
Gale International
Galia and Friends
Dr. Kathleen Gallo and Mr. Leonard L. Gallo
Mr. and Mrs. Michael G. Gallo

Gambino Medical & Science Foundation, Inc. ★

Mr. and Mrs. Thomas Gambino, Sr.

Mr. and Mrs. Leif Arntzen

Mr. and Mrs. Carl Gambino

Mr. and Mrs. Thomas Gambino, Jr.

Mr. and Mrs. Andrew Rotondi

The Garden of Dreams Foundation

Garfunkel Wild, P.C. ◆

Mr. and Mrs. Peter E. Gaslow ◆

Empire Office Equipment

Gassman Baiamonte Betts, PC

George A. Gaston Charitable Trust ◆

Gates Capital Corporation

Mr. and Mrs. E. Maxwell Geddes, Jr. ◆

Mr. Michael J. Geiger

Mr. Steven A. Geismar

Mr. and Mrs. Kirk Gellin

Genesis Real Estate Advisors, Inc.

Mr. and Mrs. Robert Genser

Ms. Gladys George and Dr. Stuart Orsher ▲

Richard S. Gershman & Associates, P.C.

Mr. and Mrs. Erik D. Gershwind

The Gershwind Family Foundation ●

Mr. Barry S. Gersten

Mr. and Mrs. J. R. Getz

Barrie-Getz Family Charitable Fund

Mr. and Mrs. Anthony Giaccone ◆

Intermarket Insurance Agency, Inc.

Mr. and Mrs. Christopher C. Giamo ◆

Mr. and Mrs. Gregory Gibbons

Mr. John V. Gibson ◆

Vincent J. & Barbara Smith Giffuni Foundation, Inc.

Gil-Bar Industries, Inc.

Mrs. Gail Gilbert ◆

Rhoda N. Gilbert Irrevocable Trust

The Clark Gillies Foundation ●

Aaron & Betty Gilman Family Foundation

Mr. and Mrs. Myron Ginsberg

Mr. and Mrs. Stephen J. Giuntini

Mrs. Jeri L. Glaser

Mr. and Mrs. Stuart A. Gleiber

Glen Oaks Club, Inc. ◆

Glen Oaks Philanthropic Fund ◆

Mr. and Mrs. Ralph Glogower

Roy Henry Glover Memorial Trust ●

Mr. and Mrs. Robert Goebert

The Arnold P. Gold Foundation

Mr. and Mrs. Arthur H. Goldberg ◆

Mr. and Mrs. Mark C. Goldberg

Mr. and Mrs. Robert M. Goldberg ■

The Fay J. Lindner Foundation

Dr. and Mrs. Bruce Golden

Mrs. Mildred Golden ◆

Mr. Robert Golden

Mr. Jay Goldman ●

John and Marcia Goldman Foundation ◆

Mr. Joshua Goldman

Mr. and Mrs. Lloyd M. Goldman ★

The Joyce and Irving Goldman Family Foundation

The Sol Goldman Charitable Trust ●

Goldman Sachs ●

Mrs. Lola Goldring Mr. Herbert M. Goldsmith ◆

Mr. and Mrs. Richard D. Goldstein ●

Mr. and Mrs. Ernest P. Gonzalez Goodhart National Gorman Agency, Inc.

Mr. Murray H. Goodman ◆

Dr. Robert Goodman

Goody Two Shoes & The Schnittman Family

Ms. Rosalyn C. Gordon ▲

Gordon & Silber, PC ◆

Mr. Lawrence Gottesman ▲

Lawrence Scott Events, Ltd.

Mr. and Mrs. Ronald A. Gottlieb ◆

Dr. Joanne Gottridge-Patrizi and Mr. Lester Patrizi ◆

Mr. and Mrs. Fredric H. Gould ▲

The Gould-Shenfeld Family Foundation

Mr. and Mrs. Jeffrey A. Gould ◆

The Gould-Shenfeld Family Foundation

Mr. Michael Gould ▲

Mr. Bruce Graber

Ms. Karen Grando

International Asbestos Removal, Inc.

Dr. and Mrs. Albert L. Granger

Dr. and Mrs. Jeffrey J. Grant ◆

Grassi & Company, CPA's

Great Island Foundation

Great South Bay YMCA

The Steven A. Greenberg Charitable Trust ●

Mr. and Mrs. Martin B. Greenberg ▲

Mr. and Mrs. Alan I. Greene ★

The David and Alan Greene Family Foundation, Inc.

Mr. and Mrs. Richard M. Greene ◆

Ms. Patricia Greenwald

Ms. Alycia Greer

American Advisors Group

The Niki and Joe Gregory Charitable Foundation ●

Mr. and Mrs. Robert Grew

Aryn and Matthew Grossman ◆

The Jason F. Gruen Research Foundation, Inc. ◆

Paul and Diane Guenther ●

Mr. and Mrs. Frank Gulden

Mr. and Mrs. Lee E. Gunderson

Dr. Leo A. Guthart ◆

Patricia and Edward Gutman ●

The H Company, Ltd.

Dr. and Mrs. Robert D. Haar

The Marc Haas Foundation ▲

Ms. Linda G. Haft

Amy Hagedorn ★

Mr. and Mrs. Stephen L. Hammerman ▲

Milton and Miriam Handler Foundation ▲

Mr. and Mrs. Bernard Hann ●

Jeri Finesilver Cancer Foundation

Mrs. Souzan Hanna and Dr. Nader Hanna

Mr. and Mrs. Robert L. Harding, Jr. ▲

Harding Educational and Charitable Foundation

Mrs. Margaret Hargraves ◆

Mortimer J. Harrison Trust ◆

Dr. and Mrs. Alan R. Hartman

Mr. and Mrs. Norman H. Harvey ◆

Mr. Walter H. Haydock

Mr. and Mrs. Stuart M. Hayim ◆

Mr. and Mrs. Ira Hazan ●

Healthcare Association of New York State & Affiliates

Healthfirst, Inc. ◆

Dr. and Mrs. William A. Healy, III

Mr. and Mrs. Michael F. Heaney

The Hecht-Levi Foundation

Dr. and Mrs. Lawrence P. Hecker

Mr. and Mrs. Steven D. Heinemann

Benjamin J. Heitner, C.P.A., P.C. ◆

Dr. and Mrs. Lawrence Helfant

Mr. and Mrs. Jonathan N. Helfat ◆

Dr. and Mrs. Alexander Hellinger

Help 4 HD International, Inc.

Dr. Jonathan M. Hemli

Henry Schein Cares Foundation ▲

Hercules Corporation

Heritage Preservation Group

Heritage Strategies, LLC

Ms. Dottie Herman ◆

Douglas Elliman Real Estate

Dr. and Mrs. Elliott Hershman ◆

Mr. Stephen Hess ◆

The Rita and Alex Hillman Foundation ●

William and Judy Hiltz ●

Mr. and Mrs. Randall S. Hinden ◆

H. M. Hughes Co., Inc.

Dr. and Mrs. Mark S. Hochberg

Mr. and Mrs. Peter J. Hoffman ◆

Mr. and Mrs. Steven R. Hoffman

Helen Hoffritz Charitable Trust ▲

Hofstra University

Mr. and Mrs. Ronald P. Hohmann

The Honeysuckle Foundation for Children with Cancer ◆

Mr. and Mrs. James B. Hoover ◆

H.O. Penn Machinery Company, Inc.

Dr. Steven M. Hormozdi

Mr. and Mrs. Richard A. Horowitz ◆

Mr. Samuel T. Horowitz

Mr. and Mrs. Stuart J. Horowitz

Mr. Serge B. Hoyda

Estate of Samuel J. Hughes ■

Hunter Roberts Construction Group

Huntington Hospital - Medical Staff ▲

Mr. Bernard Hyman

Mr. and Mrs. M. Allan Hyman ◆

Illumina, Inc.

Mr. and Mrs. Richard C. Imbert ●

Imperfectly Perfect, Inc.

Incontinentia Pigmenti International Foundation

Mr. and Mrs. Francis J. Ingrassia ◆

Institute for Veterans and Military Families ◆

Intelli-Tec Security Services

International Trade Logistics, Inc.

Dr. Harry Ioachim and Dr. Noemi Ioachim

Iranian American Jewish Federation of New York ◆

Irwin Contracting, Inc.

Island Acoustics, LLC

Island Chrysler Jeep Dodge Ram

Island Medical Specialists, PLLC

Mr. and Mrs. Stuart Israel

ISS Facility Services, Inc.

Mr. Chander S. Iyer ◆

Mr. Anthony T. Izzo ◆

Benefits Planning Corporation

The Sy & Felicia Jacobs Charitable Fund

Mr. Mark Jacobson ●

Mr. and Mrs. Mitchell L. Jacobson ●

MSC Industrial Direct Company, Inc.

Mr. Reza Jahangiri

American Advisors Group

The Jansing-Cook Foundation

J.C. Steel Corporation

JDP Mechanical, Inc.

Jewish Community Foundation of Greater Hartford, Inc.

JFK International Air Terminal. LLC

Mr. and Mrs. Thomas Crowley

JMTM Associates

John Henry's H.V.A.C. Inc.

Estate of Annette Katherine Johnson

Mr. and Mrs. Charles R. Johnson

Mr. and Mrs. James Jordan

Mr. and Mrs. Michael D. Jordan ◆

Mr. Arlin Jorge ◆

Ms. Judy A. Jorge ◆

Arlindo & Evelyn Jorge Family Trust ◆

Mr. and Mrs. Elliott Joseph ◆

The Joy in Childhood Foundation

JP Morgan Chase Bank ●

Mr. Steven Juliano

Mrs. Ann G. Jurdem

Edward and Marjorie Goldberger Foundation

Mr. Woody Kahn

Marion Kahn Charitable Lead Trust ●

Dr. Jill Kalman and Mr. Bruce Blank

Mr. and Mrs. Eric Kaltman ▲

Mr. and Mrs. Fred Kamel

Mr. John Kamen

Mr. and Mrs. Glenn J. Kaplan

Mr. and Mrs. Neal S. Kaplan

Ms. Nancy Karches

Mr. and Mrs. Peter F. Karches, Jr.

Ms. Pamela Karches Keneally

The Karches Foundation ★

Karen's Shipping, LLC

Mr. and Mrs. Elias P. Karounos

Mr. and Mrs. Brad Karp

Kasowitz, Benson, Torres & Friedman, LLP

Kat's Ribbon of Hope, Inc. ◆

Katten Muchin Rosenman Foundation, Inc.

Mr. and Mrs. Michael Katz ●

Mrs. Phyllis Katz

Mr. and Mrs. Robert G. Katz ◆

Mr. and Mrs. Saul B. Katz ★

Mrs. and Mrs. Robert Kaufman ■

Mr. and Mrs. Steven Kaufman ◆

The Kazickas Family Foundation, Inc.

Mr. and Mrs. John C. Kean, III ◆

Kean Development Company

Dr. Barbara A. Keber

Mr. and Mrs. Allan Keene

Kellenberg Memorial High School

Mr. and Mrs. D. Keller

Kelley Drye & Warren, LLP ◆

Mr. and Mrs. Jack P. Kelly

Mr. Matthew Kelly

Mr. and Mrs. Jeffrey E. Kelter ◆

Mr. and Mrs. Marc Kemp ◆

Mr. and Mrs. Donald M. Kendall

KeshCo Enterprises, Inc.

Mr. Frank F. Keshtgar

Kids Against Cancer, Inc. ●

Dr. Michael C. Kim

| | | | |
|--|---|--|---|
| The David Kimmel Foundation ◆ | Mr. and Mrs. Cary A. Kravet ● | Dr. and Mrs. Paul Lee | The Liselotte J. Leeds Lifetime Trust |
| King Kullen Grocery Company, Inc. ◆ | <i>Kravet, Inc.</i> | Mr. Ronald J. Lehrman | Mr. Leonard Litwin ★ |
| Dr. Linda A. Kirschenbaum and Dr. Charles M. Carpati | Mr. and Mrs. Scott Kravet | Dr. and Mrs. Lyle S. Leipziger ◆ | Lizardos Mechanical & Electrical Engineering |
| Dr. and Mrs. Alan M. Kisner ◆ | Ms. Francine Kreuter | Lend Lease | Lodging Solutions, LLC |
| Mr. and Mrs. William H. Kissam | Dr. and Mrs. Atul Kukar | Lenox Hill Medical Anesthesiology, PLLC ▲ | The Longhill Charitable Foundation, Inc. |
| <i>Pyramid Air Conditioning, Inc.</i> | Mr. and Mrs. Philip R. Kull | Mr. and Mrs. Jonathan Leonard | Long Island Charities Foundation, Inc. |
| Mr. and Mrs. Errol Kitt | The Kupferberg Foundation ● | Dr. Oren Z. Lerman | Long Island Community Foundation ◆ |
| Kiwanis Pediatric Trauma Center Foundation ● | Jack & Dorothy Kupferberg Family Foundation ● | Mr. and Mrs. Leslie A. Lerner | Long Island Jewish Medical Center - Administration |
| Mr. and Mrs. Richard P. Kleinknecht ▲ | Mr. and Mrs. Seth Kupferberg ● | Mrs. Jean W. Lesser | Long Island Spine Specialists, P.C. |
| <i>The Kleinknecht Electric Company</i> | The Rita & Sheldon Kwiat Family Foundation, Inc. ◆ | Mr. and Ms. Marc Lessner | Mr. Glenn Lostritto |
| Mrs. Marion Kleinkramer ◆ | Lakeville Pace Mechanical, Inc. | The Leukemia & Lymphoma Society, Inc. | <i>2200 Northern Steel, LLC</i> |
| KLS Martin, LP | Mr. and Mrs. Frank Lalezarian ◆ | Mr. and Mrs. Richard Leventhal | <i>Steel O-II, LLC</i> |
| Mr. and Mrs. Charles E. Knapp ● | <i>Granite Building 2, LLC</i> | Mr. and Mrs. Arthur S. Levine ● | Mr. and Mrs. James J. Loughlin ◆ |
| Knockout Pest Control | Mr. Brian J. Laline | Dr. Mitchell E. Levine | <i>LM & Company</i> |
| Kohl's Cares ● | Mr. and Mrs. Brian T. Lally | Mr. and Mrs. Stuart R. Levine ◆ | Mrs. Eileen Ludwig Greenland ● |
| Stephanie Kollar ◆ | Mr. and Mrs. Michael T. Lamoretti | Mr. and Mrs. Andrew S. Levinson | Lupus Research Alliance |
| Susan G. Komen Greater New York City ◆ | The Robert E. Landreth and Donna Landreth Family Fund ▲ | The Leviton Foundation, Inc. ● | Lupus Research Institute, Inc. ● |
| Kone, Inc. | Mr. and Mrs. Jerry Landsberg ◆ | Mr. and Mrs. Edwin A. Levy | The Carleigh Mac Foundation ● |
| Friends and Family of Anastasia Kostaris ◆ | Mr. and Mrs. Clifford P. Lane ■ | Estate of Leo J. Levy ◆ | The Nancy Lurie Marks Family Foundation ▲ |
| Karen M. Kostroff, MD and Jon R. Cohen, MD ◆ | Mr. and Mrs. Jeffrey B. Lane ● | Mr. and Mrs. Mark D. Levy | Mr. and Mrs. James P. MacGilvray |
| Mr. John S. Koudounis | Mr. Robert Lane | Mr. and Mrs. Stephen M. Levy | Mrs. Lorraine R. Machiz ● |
| Ambassador Eleni T. Kounalakis | Mr. David Langer | Mr. and Mrs. Randall Lico | Mr. and Mrs. David S. Mack ■ |
| Mr. and Mrs. Jeffrey T. Kovner ◆ | Dr. David Langer | Mr. and Mrs. George J. Liebner | Mr. and Mrs. Earle I. Mack ◆ |
| <i>The Judith C. White Foundation, Inc.</i> | Ms. Jane D. Lascher | Lifetime Brands, Inc. | Mr. and Mrs. William L. Mack ★ |
| Mr. Anastasios Kozaitis | Mr. and Mrs. Andrew E. Laufer | Ms. Kamie Lightburn | Mr. and Mrs. William S. Mack, Jr. |
| Mr. and Mrs. Werner H. Kramarsky | <i>Landau Arnold Laufer LLP</i> | Lilling Family Fund for Neonatal Research ◆ | Mr. Edward A. Mafoud |
| Dr. and Mrs. Mitchell S. Kramer | Mr. and Mrs. Alexander M. Laughlin ◆ | <i>Mr. and Mrs. Mark S. Lilling</i> | Diane and Darryl Mallah ● |
| Kramer Foundation | Mr. and Mrs. Curtis N. Launer ▲ | <i>Mr. and Mrs. Adam S. Lilling</i> | Manatt, Phelps & Phillips, LLP |
| Kramer Levin Naftalis & Frankel LLP | The Bernard and Muriel Lauren Foundation | <i>Mr. and Mrs. Matthew S. Lilling</i> | Mr. Philip Mancuso |
| Mr. and Mrs. Ronald D. Kranzler | Mark Lauria Associates, Inc. ◆ | Limo Almi Foundation ● | Keith and Linda Manfredi ▲ |
| Estate of Louis Kratenstein ◆ | The Alice Lawrence Foundation, Inc. | Mr. and Mrs. Peter J. Linchitz | <i>The Joseph Maffeo Foundation</i> |
| | Dr. and Mrs. Richard S. Lazzaro | Lincoln Land Services | Manhasset Women's Coalition Against Breast Cancer ▲ |
| | Mr. and Mrs. Thomas G. Lederer | Mr. and Mrs. Andrew S. Linder ◆ | |
| | Sol and Mildred Lederman Supporting Foundation ◆ | Dr. Sarah K. Linkie-Gorenstein | |
| | | Dr. and Mrs. Frederick W. Lipfert | |
| | | Seymour V. & Zena Lipkowitz Foundation, Inc. | |

Mr. and Mrs. Alan J. Mann
Mr. and Mrs. Michael Mann ◆
Dr. Panagiotis A. Manolas
Mr. Tom Marano
Mrs. James S. Marcus ●
The Marina Cafe
MarineMax Corporate Office
Mariner's Harbor Post
5521 Veterans of Foreign
Wars, Inc.
Mr. and Mrs. George L. Marks ◆
Marlande Heating Corporation
Marron Foundation
Dr. and Mrs. Bradley J. Marsh ▲
JemCap, LLC
Mr. and Mrs. Peter J. Marsh
JemCap, LLC
Martin Clearwater & Bell, LLP ▲
Gertie F. Marx Private
Foundation ◆
The Page & Otto Marx
Foundation ▲
The William Marx Foundation ◆
Mr. and Mrs. Frank P. Marzano ◆
GM Advisory Group, Inc.
Mr. and Mrs. Michael Maturo
Ms. Helen Matuz ◆
Mr. and Mrs. Jeffrey S. Maurer ◆
Maximum Cooling, Inc.
Mr. Ryan Maxwell
Mayer Brown, LLP
Mr. and Mrs. Michael Mazzei ◆
nuBest Salon and Spa
Mr. and Mrs. Thomas J. McAteer
Mr. James McCahill
St. James Insurance Group
Mr. and Mrs. James McCahill
Dr. and Mrs. Sean E. McCance
Mr. and Mrs. F. J. McCarthy ◆
341 Commack Road, Inc.
Site Selection Advisory Group
Mr. Anthony McDevitt
McFar Construction, Ltd.
Dr. Joseph T. McGinn, Jr. ◆
Drs. Lata and Thomas G. McGinn
Mr. and Mrs. J. Stewart
McLaughlin ◆
Mechanical Solutions, Inc.
Mechanical Technologies, LLC
Meda Pharmaceuticals
MedAssets
Medtronic ◆
Mr. Dennis Mehiel
Mr. Rocco Meliambro
Margaret Mellon Hitchcock
Foundation ◆
Mr. Bruce G. Meltzer ◆
*Triangle Building Products
Corporation*
Lewis S. Meltzer, Esq. ◆
The Meltzer Lippe Foundation
Millennium Foundation Trust
Mr. Robert Menschel
Ms. Rita Mercieca
Mrs. Susan L. Merinoff ★
Merkle, Inc.
Meszaros Engineering, PLLC
Metropolitan Commercial Bank
Metropolitan Property Services
Mr. and Mrs. Lee Metzendorf ◆
Mr. and Mrs. Martin L. Meyers
Michael Kors (USA), Inc.
Michaels Philanthropic
Foundation ▲
Middlemarch Partners, LLC
Dr. Jennifer H. Mieres and Dr.
Haskel Fleischaker
The David B. Miller Family
Foundation
Mr. and Mrs. Edward D. Miller ●
Mr. and Mrs. Jeff Miller
Mr. and Mrs. Kenneth J. Miller
Mr. and Mrs. Richard T. Miller
Mr. and Mrs. Sidney A. Miller ◆
Dr. and Mrs. Bushra Mina
Mr. and Mrs. Michael Mindlin
The David Minkin Foundation ◆
Dr. John Minutillo
Ms. Ashley Misir
Ms. Gabrielle C. Mitchell
Mr. and Mrs. Neil Mitchell
MITCHELLS of Huntington
Dr. and Mrs. Mark A. Mittler ◆
MKP Capital Management, LLC
Modern Sprinkler Corporation
The Ambrose Monell
Foundation ●
Monster's Kids ◆
Mr. and Mrs. Richard E. Montag
The Don Monti Memorial
Research Foundation, Inc. ★
Erin and Richard D. Monti
Caroline and Arthur Saladino
Ms. Barbara B. Moore
The James D. & Kay Y. Moran
Foundation
Mr. and Mrs. Patrick Moravick
Morgan Stanley ◆
Morgan, Lewis & Bockius, LLP
Mr. and Mrs. T. Kevin Moriarty
Moritt Hock & Hamroff, LLP
Mr. and Mrs. Gary E. Morris
Mr. Robert Morris
Mr. and Mrs. Sanford Morris
Mr. and Mrs. Stanley J. Morris ◆
The Rampart Group
Mr. and Mrs. Joseph Moscola
Ted Moudis Associates, Inc.
MSG Sports and Entertainment,
LLC
Mr. and Mrs. Paul Mullins ▲
Susan Munro
Mr. and Mrs. Richard H.
Murcott ◆
Mr. and Mrs. Thomas P. Murphy
Mr. and Mrs. Francis W.
Murray, III
Mr. and Mrs. Robert Murray ◆
*Morris and Gertrude Furman
Foundation*
Mr. and Mrs. Alvin Murstein ◆
Mr. and Mrs. Stanley Muss ◆
*Hyman and Ruth Muss
Foundation, Inc.*
Mr. and Mrs. Robert J. Myers ◆
Dr. and Mrs. Souhel Najjar
Mr. and Mrs. Ralph A. Nappi ◆
Drs. Tina and Raj K. Narayan
Drs. Beth and Ira Nash
Nash Family Foundation ★
Nate's Corporation
Mr. and Mrs. Raffiq Nathoo
National Hockey League
Foundation
Ms. Denise M. Neiditch-Breger
Craig H. Neilsen Foundation ◆
Mr. and Mrs. James L. Neisloss ▲
*Conyngnam Foundation
Agency*
Ms. Mindy B. Nelkin
Mrs. Ruth T. Nelkin ■
The Richard and Barbara Nelson
Foundation
Network For Good
Neuberger Berman, LLC
New View Advisors, LLC
New York Community Bank

| | | | |
|---|--|---|--|
| New York Community Bank Foundation ▲ | Mr. Daniel K. Olsen | The Paul Foundation | Ms. Maxine Portnof |
| New York Crohn's Foundation ● | Mr. and Mrs. Stuart P. Olsten ● | PCORI ● | Mrs. Michelle Portnof |
| New York Eye & Ear Infirmary | Dr. and Mrs. Lawrence Y. Ong | Pediatric Cancer Foundation ▲ | Mr. and Mrs. Ronald Portnoy |
| New York Fire Alarm Association, Inc. | Optum Services, Inc. | Nicholas Pedone Foundation ◆ | The Posillico Foundation, Inc. |
| The New York Mets Foundation, Inc. ● | The Orchard Farm Foundation | Penn Toyota, Ltd. | Mr. and Mrs. Paul F. Posillico |
| NFS Sales, Inc. | Original Energy | Mr. and Mrs. Arnold S. Penner | Dr. and Mrs. David H. Posner |
| Henry Nias Foundation, Inc. ● | Mr. and Mrs. Justin Ort | People's United Bank | Mr. David K. Powers |
| Dr. and Mrs. Stephen J. Nicholas ◆ | Dr. Rafael Ortiz | Mr. and Mrs. Bruce D. Pergament ▲ | Premier Mechanical Services, Inc. |
| Nicklaus Companies, LLC | Dr. Viola Ortiz and Dr. James F. Kenny ◆ | Mr. and Mrs. William Perks | Presidio Networked Solutions, Inc. |
| Ms. Patricia A. North | OTG Charities, Inc. | Ms. Nora C. Perry | Primary Care Ambulance Service Corporation ▲ |
| North American Partners in Anesthesia, LLP ■ | Mr. and Mrs. Jonathan B. Otto | Mr. and Mrs. Gary R. Petersen | Prime: An American Kitchen & Bar |
| The North Beach Club, Inc. | Mr. and Mrs. Joseph A. Ottomanelli | Mr. and Mrs. Jeffrey Petersen | Priority One Ambulance, Inc. |
| North Jersey Property Maintenance | Our Island Real Estate, Inc. | <i>American Signcrafters</i> | Project to Cure ● |
| North Shore Implant & Oral Surgery Associates | Oxford & Simpson Realty Services, Inc. | <i>Daniel Gale Sotheby's International Realty</i> | Prolacta Bioscience |
| North Shore University Hospital - Medical Staff Society ◆ | Oxford Airport Technical Services | Mr. and Mrs. Attilio F. Petrocelli ● | Ms. Donna M. Proske |
| The Northern Trust Company ◆ | Richard and Lois Pace Charitable and Cultural Fund | Dr. Thomas Petrone | Protecting One Young Heart at a Time, Inc. |
| Northfield Bank Foundation ▲ | Mr. and Mrs. John Padden ■ | Mr. and Mrs. Paul Peykar | PS Marcato Elevator Company, Inc. |
| Nostalgic Partners, LLC | Mr. and Mrs. Dennis L. Palmgren | <i>Nourison Industries, Inc.</i> | Phyllis L. Pullman ◆ |
| Mr. and Mrs. Edward M. Novick | <i>Wrightson Ramsing Foundation</i> | PGA Tour, Inc. ◆ | Mr. and Mrs. Mark D. Purdy |
| The Penny Smith Novick Foundation ◆ | Mr. and Mrs. Philip Palumbo | PG Genatt Group, LLC | Pure Insurance |
| Francesca Stanfill Nye and Richard B. Nye ● | PAN Long Island Challenge, Inc. ◆ | Pharmacyclics ◆ | P.W. Grosser Consulting, Inc. |
| NYBKW Charitable Foundation ◆ | Mr. and Mrs. James A. Pappas ◆ | Philips Healthcare ◆ | Pyramid Foundation, Inc. ● |
| Mr. and Mrs. Robert E. O'Connell | <i>P.J. Mechanical Corporation</i> | Ms. Barbara Phillips | QBECF Nursing Home |
| Abby and George O'Neill Trust ▲ | Mr. and Mrs. Peter J. Pappas, Jr. ▲ | Phillips Family Foundation | Ms. Mandy Quach |
| Mr. and Mrs. Paul Oberkotter ● | <i>P.J. Mechanical Corporation</i> | Pierre Fabre Pharmaceuticals USA | Mr. and Mrs. Mitchell I. Quain |
| OB-GYN Services, PC ◆ | Paragon Group, LLC | Sharon and Rubin Pikus ◆ | The Stanley and Iris Rabinowitz Foundation |
| Mr. and Mrs. Michael G. Odlum | The Paramount Theatre, LLC | Mr. and Mrs. Robert A. Pilkington | Mr. and Mrs. Nicholas H. Racanelli |
| Mr. and Mrs. Morris W. Offit | Mr. and Mrs. Christopher M. Parker | Pink Aid, Inc. | Mr. Richard M. Racanelli ◆ |
| Dr. Patrick Okolo | Mr. and Mrs. A. Richard Parkoff ● | Pinkerton Trust ■ | <i>Racanelli Construction Company, Inc.</i> |
| The Olin Family Foundation, Inc. ◆ | Moses L. Parshelsky Foundation ◆ | Pinnacle Asset Management, LP | Mr. and Mrs. Laurence Radbell ◆ |
| Mr. and Mrs. Frank J. Ollari | Mr. Michael Passantino | Plumbers Local Union No. 200 | Mr. John Raggio, Sr. and Dr. Donna Raggio ■ |
| | Ms. Christine P. Pastore | PNC Institutional Asset Management | Mr. Lewis S. Ranieri ● |
| | Mr. and Mrs. Frank P. Patafio | Mrs. Jill R. Podell | Mr. and Mrs. Salvatore A. Ranieri |
| | Dr. Nirav Patel | Mr. and Mrs. Daniel B. Polatsch | Michael and Paula Rantz Foundation |
| | | Mr. and Mrs. Edward K. Portnof | |

Drs. Suhail and Sabiha Raof
 Raphael Sanders Goldberg
 Nikpour & Cohen CPA's PLLC
 Mark Raphael, C.P.A., P.C
 Mr. and Mrs. Charles Rappaport
 Mr. and Mrs. Hank Ratner
 Mr. Hanley Rayano
 Raynor & D'Andrea Funeral
 Home
 RBC Capital Markets, LLC
 Frank J. Reali III Family
 Foundation, Inc. ◆
 Mr. and Mrs. Bennett L. Rechler ◆
 Mr. and Mrs. Donald Rechler ▲
 Mr. and Mrs. Scott Rechler ●
Save the Starfish Foundation
 Recovery Racing III, LLC
 Red Apple Group
 Red Hook Construction
 Group, LLC
 Mr. Ronald Reede
 Mr. and Mrs. Michael D. Rees
 Mr. Daniel S. Reich
 Ms. Jamie L. Reich
 Charles and Helen Reichert
 Family Foundation ●
 Dr. and Mrs. Carl D. Reimers
 Mr. and Mrs. Richard Reitman
 Drs. Maria and Angelo Reppucci
 Republic National Distributing
 Company Foundation, Inc.
 Dr. Charlotte Ann Rhee
 Drs. Dae-Sik and Richard Rho ◆
 Mrs. Judith Rhulen
 Richmond County Savings
 Foundation ●
 Richmond University Medical
 Center
 Dr. and Mrs. James J. Richter ◆
 Mr. and Mrs. John R. Riconda ◆
*Contemporary Computer
 Service, Inc.*

Mr. and Mrs. Fred J. Rieger, Jr. ◆
 Mr. and Mrs. Dennis Riese ●
 Bernard Rifkin Family Charitable
 Foundation
 Ripco Real Estate
 Dr. and Mrs. David E.
 Rivadeneira
 Mr. and Mrs. Thomas Rizzo
 Robert Wood Johnson
 Foundation ●
 Mr. and Mrs. Joseph Roberto
 The Robin Hood Foundation ●
 Mr. Frank Rodgers
 Mr. and Mrs. Allan Rodolitz ◆
 Dr. Jose A. Rodriguez
 Mr. and Mrs. James C. Romanelli
 Dr. James N. Romanelli ◆
 Mr. Gary Rombough
 Mr. Ronald V. Rose
 Martin and Joan Rosen
 Foundation
 Admiral and Mrs. Robert A.
 Rosen ●
 Dr. Stacey Rosen
 Dr. and Mrs. Richard F.
 Rosenberg
 Ms. Melissa Rosenblum
 Mr. and Mrs. Robert D.
 Rosenthal ●
First Long Island Investors, LLC
 Dr. and Mrs. Bernard M. Rosof ◆
 Mr. and Mrs. George H. Ross ●
 Mr. and Mrs. Jack J. Ross ●
 Mr. and Mrs. Laurence Roth ▲
 Mr. and Mrs. Sidney Roth ◆
 Marcia and Philip Rothblum
 Foundation, Inc.
 Mr. and Mrs. Richard J. Rouse
 Dr. Norman Rowe
 Royal Waste Services, Inc.
 RTR Financial Services, Inc.

Mr. and Mrs. Barry
 Rubenstein ★
 Herbert Rubin, Esq. ◆
 Mr. and Mrs. Michael Rubinberg
Rubicon Industries Corporation
 Mr. and Mrs. Domenick T.
 Ruttura
 Mr. and Mrs. Arthur F. Ryan ◆
 Mr. and Mrs. Alan Sackman
 Mr. and Mrs. Edward S. Sacks ▲
 Robert and Lynda Safron Family
 Fund
 Mr. and Mrs. Michael H. Sahn ◆
Sahn Ward Coschignano, PLLC
 Saint George's University
 Limited
 Saint Vincents Catholic Medical
 Centers
 The Salem Foundation
 Samadi Robotics Foundation
 The Mara and Ricky Sandler
 Foundation
 Ms. Rachel M. Sands
 Sanford C. Bernstein & Co., LLC
 Mr. Michael Saperstein
 Dr. and Mrs. Homayoun Sasson
 Scaran Oil Service Co., Inc.
 Mr. and Mrs. Dominick
 Scaringella
 Mr. and Mrs. Kenneth Schack ◆
 Mr. and Mrs. Jerome M.
 Scheckman
 Mr. and Mrs. Norman A.
 Schefer ■
The Fay J. Lindner Foundation
 Dr. and Mrs. S. J. Scheinerman
 Mr. and Mrs. Bernhard R.
 Schiel ◆
 Mr. and Mrs. Peter G. Schiff ◆
 Dr. Mark B. Schiffer
 Mr. Norman Schlanger and
 Ms. Judith Kay ●

Mrs. Jill Schlanger-Kalogeras
 Mr. Mark Schlau
 Dr. and Mrs. Charles L. Schleien
 Mr. and Mrs. Alan H. Schlesinger
 Dr. and Mrs. Steven J.
 Schneider ◆
 Mr. and Mrs. Steven B.
 Schonfeld ●
 Mr. and Mrs. Eric R. Schuss ◆
 Mr. and Mrs. Charles A.
 Schwartz
 The Lorraine and Richard
 Schwarz Family Foundation
 Scopia Capital Management, LP
 Mr. and Mrs. Carl Scotti
 Dr. and Mrs. Giles R. Scuderi
 Mr. and Mrs. Gordon L.
 Seaman, Jr. ◆
Gordon L. Seaman, Inc.
 Sebonack Golf Club, LLC
 SEJ Properties, LP
 Randi and Eric Sellinger
 Foundation, Inc.
 Mr. and Mrs. Reuben Seltzer ◆
 Arthur J. Semetis, PC
 Mr. and Mrs. Stewart Senter ◆
 Ms. Amanda Serna
 The Service Guild of Long Island
 Jewish Medical Center ●
 Mr. Joshua Setton
The Setton Foundation
 Seventh District
 Association, Inc. ◆
 Mr. and Mrs. Timothy F. Sexton
 Dr. and Mrs. Abe Shahim
 Mr. Eric J. Shames
 Mrs. Francine Shapiro
 The Philip and Janet Shapiro
 Family Foundation, Inc. ◆
 Mr. and Mrs. Robert S. Shapiro ◆
 Mr. and Mrs. Steven L. Shapiro
 Sharp Fund PLD

| | | | |
|---|---|--|---|
| Ms. Anastasiya Shcherbenok | Richard Mark Smith Fund ▲ | Staten Island Devildogs Foundation | Swim Across America ◆ |
| Mrs. Nancy S. Shea | Mr. and Mrs. Steven J. Smith | The Staten Island Foundation ● | Swing for Smiles ● |
| Mr. and Mrs. Steven Shenfeld ◆ <i>The Gould-Shenfeld Family Foundation</i> | Smith Affiliates Management Corporation | Staten Island University Hospital - Medical & Dental Staff ■ | SWS Charitable Foundation, Inc. |
| The Claude Sherman Family ▲ | Snowlift, LLC | Staten Island Pulmonary Associates, PC | Syosset Hospital - Medical Staff ◆ |
| Murray G. and Beatrice H. Sherman Charitable Trust ◆ | Sodexo, Inc. and Affiliates ▲ | Staten Island Rehabilitation Medicine, PC | Taffner Family Charitable Trust ● |
| Francis Shook Trust | Ms. Deborah K. Solbert | Staten Island U.S.B.C. Tournament | Mr. and Mrs. Edward Tam |
| Shore Family Foundation, Inc. ▲ | Mr. Lloyd Solomon | Renee F. Stave and Howard D. Stave ◆ | Mr. and Mrs. Laurence Tarica ▲ |
| Shore to Shore Realty Partners, LLC | Soros Fund Charitable Foundation - Matching Gift | Steel Beacon, LLC | Mrs. Nancy N. Tarnoff ◆ |
| Ms. Lisa Sicurelli | Martin & Toni Sosnoff Foundation | Jane and Frances Stein ★ | Ms. Felicia Tashkovich and Mr. Seymour Jacobs |
| Sidley Austin, LLP | Sottile & Megna, MD PC ◆ | Mr. and Mrs. Bertram Steinman ◆ | Mrs. Linda M. Taub ◆ |
| Mr. and Mrs. Jeffrey Siegel ◆ | South Bay Anesthesia Associates, LLP ▲ | Step-by-Step Charitable Foundation, Inc. | Mrs. David S. Taylor ◆ |
| Signature Construction Group | Southside Hospital - Medical Staff ◆ | Sterling Equities, Inc. | Taylor's Hope ◆ |
| The Stephen A. Signorile Family Fund | Sparkling Ice | Sterling Mets, L.P. | TD Bank ▲ |
| Mr. and Mrs. Joel Sikowitz | Mr. and Mrs. Scott Spector | Mr. and Mrs. Russell Stern ● | Teenok Heart Foundation ◆ |
| Mr. and Mrs. Mark Silber | Jerry I. Speyer and Katherine G. Farley ◆ | Mr. and Mrs. Steven S. Stern | Dr. and Mrs. Myron Teitelbaum ◆ |
| Mr. and Mrs. Steven C. Silva | Dr. Lawrence Spielberger & Dr. Greta Spanierman Family Foundation | Mr. and Mrs. Martin Sternberg | Dr. Celso A. Tello |
| The Louis and Martha Silver Foundation ◆ | Mr. and Mrs. Charles H. Spielman ● | Mrs. Sybil Sternlieb | Ms. Helaine Teperman |
| Dr. Stephen G. Silver | Mr. Harold M. Spielman ◆ | Steuben Foods, Inc. | Mr. and Mrs. Marvin B. Tepper ◆ |
| Alison and David Simon | Mr. and Mrs. Robert A. Spielman | Mr. Jack Stievelman ▲ | TG Nickel & Associates |
| Ms. Audrey Simons | St. Baldrick's Foundation ● | Edward K. Straus Fund ◆ | Mr. and Mrs. David Thalheim |
| Drs. James and Marilyn Simons | St. Jude Medical ◆ | Mr. Edward Strausman ◆ | John M. and Joan F. Thalheimer Family Charitable Foundation |
| Dr. Henry Simpkins | St. Paul's School of Nursing - Staten Island ◆ | Mr. and Mrs. George Strausman ● | Thompson Land Services, Inc. |
| Mr. and Mrs. Richard Sims ★ | Mr. and Mrs. Robert W. Stackler ◆ | Mr. and Mrs. Edward H. Streim ● | Dr. Charles H. Thorne |
| Dr. and Mrs. Todd Sinett | Staff Society of the Long Island Jewish Medical Center ◆ | STV | Mr. and Mrs. Peter Tilles ● |
| Mrs. Susan E. Singer ◆ | Stanley's Garden Foundation | Subaru of America, Inc ◆ | Dr. and Mrs. Nathaniel L. Tindel |
| Dr. Binoy K. Singh | Starrett Foundation | Mr. and Mrs. Peter M. Sullivan | Edward R. Tinker Charitable Trust ◆ |
| Dr. Varinder Singh | State Capital Title & Abstract Company | Sunbelt Beverage Company, LLC | Mr. Barry Tobias |
| SK Foundation ● | Staten Island Advance | The Margot Sundheimer Foundation | Mr. and Mrs. Bradley J. Tolkin |
| Mr. and Mrs. Martin Sklar | Staten Island Board of Realtors, Inc. | Super Shuttle | Mr. and Mrs. Steven L. Tomback |
| Mr. and Mrs. Michael C. Slade ● | | SurgiCare of Manhattan, LLC | Toolan Family Foundation |
| Mr. and Mrs. Richard Slone ▲ | | Barry and Carol Swidler ◆ | Mr. Lewis E. Topper |
| Mr. and Mrs. Ira N. Smith | | | Mr. and Mrs. Kouros Torkan ◆ |
| Dr. and Mrs. Lawrence G. Smith | | | Tourette Association of America, Inc. |
| Mr. and Mrs. Michael S. Smith ◆ | | | Toyota Dealer - Match Program |
| Estate of Raymond J. Smith | | | Trane Company |

| | | | |
|---|---|---|-----------------------------------|
| Transamerica Retirement Solutions Corporation | James F. Volpe Electrical Contracting | Estate of Sylvia Weissman ▲ | The Eugene Zitwer Foundation Inc. |
| Travelers | Mr. Kenny Voss | Mr. and Mrs. Howard S. Weitzman ▲ | Mr. Richard Zogheb |
| Travelliance Chicago | <i>Prince Carpentry, Inc.</i> | Wells Fargo Home Mortgage | Zorich Family Foundation |
| H. Craig and Lora B. Treiber ◆ | Vulcan Iron Works, Inc. | Mr. and Mrs. Patrick T. White | Mr. and Mrs. Donald Zucker ★ |
| The Treiber Family Foundation, Inc. ◆ | The Honorable Sol Wachtler and Mrs. Joan Wachtler ◆ | Mr. and Mrs. Stuart B. Wilkins ▲ | Mr. Roy J. Zuckerberg ★ |
| Trimont Real Estate Investors | Mrs. Iris Wagman | Mr. and Mrs. Robert B. Willumstad ● | |
| Dr. Paula D. Tropello and Mr. Samuel Tropello | Dr. Samuel J. Wahl | Mr. and Mrs. Fred Wilpon ■ | |
| Mr. and Mrs. Peter K. Tully ◆ | Drs. Ruth and Robert Waldbaum | Wilson, Elser, Moskowitz, Edelman & Dicker, LLP ◆ | |
| <i>Tully Construction Co., Inc.</i> | Ellen M. Walker, Esq. and The Honorable Paul Creditor | Ann and Tony Wimpfheimer ● | |
| Dr. and Mrs. Norman B. Turowsky | Mr. and Mrs. Emmett F. Walker ◆ | Mr. John G. Winchester | |
| Mr. and Mrs. William B. Tyree | Mr. and Mrs. Bruce Waller ◆ | Estate of Daisy Maria Wincor | |
| Mr. and Mrs. Howard Tytel ● | <i>Roberta Schaefer Family Foundation</i> | <i>A.G. Burnham Charitable Fund, Inc.</i> | |
| UBS Financial Services, Inc. ▲ | Jean Walton Fund for Lymphoma and Multiple Myeloma Research | The Erika and Kenneth Witover Family Foundation | |
| UJA-Federation of New York ● | Mr. and Mrs. Stuart Walton | WMC Foundation | |
| United Healthcare Services, Inc. | Dr. Milton Waner | Dr. and Mrs. Scott C. Wodicka | |
| United Hospital Fund of New York ● | Mr. Paul E. Warburgh, Jr. ▲ | Mr. and Mrs. Arnold Wolowitz ◆ | |
| Upper East Side Rehabilitation and Nursing Center | Mr. and Mrs. Robert W. Warburgh ▲ | The Workplace Group | |
| U.S. Bancorp Fund Services, LLC | Mr. and Mrs. Sean J. Ward | Mr. Peter J. Worth | |
| Van Deusen & Associates | Mr. and Mrs. Warren T. Wasp | Mr. and Mrs. Henry T. Wu | |
| Vanderlande Industries, Inc. | Waterfall Asset Management, LLC ▲ | Estate of Samuel Wunsch | |
| Varnum-DeRose Charitable Remainder Annuity Trust | Ms. Robin L. Waxenberg | John Xikis Foundation, Inc. | |
| Vaslas Lepowsky Hauss and Danke, LLP | W.B. Mason Company, Inc. | Mr. and Mrs. Bruce Yablon | |
| Veejay Foundation ◆ | Mr. Michael Weber | Albert Yedid Trust | |
| Estate of Jean A. Vergain ● | Weil, Gotshal & Manges, LLP ◆ | Mr. Edmund Yee | |
| Vicom Computer Services, Inc | Theodore & Renee Weiler Foundation, Inc. ◆ | Dr. Benson Yeh | |
| Dr. Phillip Vigneri | Penni and Stephen Weinberg Fund | Mr. George Zachary | |
| Village Care of New York, Inc. | Mr. and Mrs. Howard Weingrow ● | M.B. & Edna Zale Foundation ◆ | |
| Dr. Jeannine Villella | Chantal and Paul Weinhold | The Bradley Zankel Foundation, Inc. | |
| Visiting Nurse Association of Staten Island ◆ | Mrs. Pepi Weis ◆ | Mr. and Mrs. Scott E. Zelnick | |
| Vital Projects Fund, Inc. ◆ | Mr. and Mrs. Ted D. Weiss | The Zenna Family Foundation, Inc. | |
| Ms. Carolyn M. Vivaldi | <i>T. Weiss Realty Corporation</i> | Mr. and Mrs. Michael J. Zimmerman | |
| Mr. and Mrs. Donald G. Vogel | | Dr. and Mrs. Robert G. Zingale | |
| <i>Nassau Flyers</i> | | Mr. and Mrs. Daniel B. Zirinsky | |

Payson Wharton Legacy Society



The Payson Wharton Legacy Society acknowledges our generous friends who have provided for Northwell Health through planned gifts of any amount. Planned gifts include those made through wills and trusts, life insurance policies and retirement plans, charitable remainder and lead trusts, and charitable gift annuities.

To become a member, an individual must make a planned gift to Northwell Health Foundation and notify us of the gift. For more information about the Payson Wharton Legacy Society, contact Alexandra Brovey at 516-321-6260.

Mr. Alex O. Aliksanyan
Anonymous (24)
Mrs. Elizabeth Apelian
Mr. Nishan Apelian
Mr. Gerald Appel
Stanley A. Applebaum, Esq.
Mr. Kenneth Asch
Mrs. Lillie G. Bain
Dr. Richard Berg
Mrs. Willa Bernhard
Mr. Frank J. Besignano
Mrs. Laura Besignano
Ms. Barbara Birnbaum
Mr. Norman E. Blankman
Mr. Adrian T. Bogart, Jr.
Mr. Moe Bordwin
Mr. Murray Breidbart
Mr. Dayton T. Brown, Jr.
Mrs. Karin Brown
Ms. Sandra Brown
Mr. Simon Burton
Ms. Vera Capovilla
Mrs. Patricia Case
Mr. Marvin Chaikin
Ms. Cathy Chen
Mr. Edward A. Chernoff
Mrs. Dorothea Christie
Mr. Warren A. Christie
Mrs. Maria Ciccarelli
Mr. Rocco Ciccarelli
Mrs. Bernice Cohen
Ms. Sharon J. Cohen
Mrs. Dulce M. Correa
Mr. Fidias N. Correa
Ms. Tamela Corrieri
Mr. Anthony Dalessio
Mr. Joseph F. D'Angelo
Mr. Willard H. DaSilva
Mrs. Katherine M. Davis
Mrs. Lorinda P. de Roulet
Mr. Maurice A. Deane
Mrs. Elinor DeNicola
Mr. Joseph DeNicola
Ms. Elaine DiGiacomo

Mr. Kevin J. Dwyer
Mr. Peter Engel
Ms. MaryAnn Evans
Mrs. Ada Flower
Mr. Franklin Flower
Mr. Leonard L. Gallo
Dr. Kathleen Gallo
Mr. Albert Garshall
Mr. J. Ronald Gaudreault
Mrs. Joan M. Gaudreault
Mrs. Frances L. Gazza
Ms. Helen Georgiadis
Mrs. Candice Goldstein
Mr. Richard D. Goldstein
Dr. Merrill Goodman
Mrs. Phoebe Goodman
Mr. George Gottridge
Mrs. Lenore Gottridge
Mr. Martin B. Greenberg
Mr. Alan I. Greene
Mrs. Helen T. Greene
Mr. Gerald Halpern
Mr. Carl D. Harnick
Mrs. Elaine Hecht
Mr. Norman Hecht
Mr. Harold Hoffman
Mr. Arnold Holtzman
Mrs. Johanna Hurwitz
Mr. Chander S. Iyer
Mrs. Iris J. Katz
Mr. Saul B. Katz
Mr. Martin Kaufman
Ms. Stephanie Kollar
Mr. Cary A. Kravet
Mrs. Lisa Kravet
Mr. Stanley Kreitman
Ms. Dale R. Landy
Mrs. Harriet Laxer
Mrs. Marion Leber
Mr. Steven Leber
Mrs. Linda Leshnick
Mr. Stephen Leshnick
Mrs. Sylvia M. Lester
Mr. Donald I. Levin

Mr. Arthur S. Levine
Dr. Frederick W. Lipfert
Ms. Catherine Lomuscio
Ms. Arri Lord
Mrs. Lorraine R. Machiz
Mr. Kevin Mahony
Mrs. Flora Major
Mr. Herbert Maletz
Mrs. Antonia Marcos
Mrs. Diane Martakis
Mr. John Martakis
Ms. Lena Mazzarella
Ms. Rose Mazzarella
Mr. Ronald J. Mazzucco
Mr. James E. Meyer
Mrs. Roberta Meyer
Mr. Edward D. Miller
Mrs. Rona Miller
Mr. Sidney A. Miller
Mrs. Colette Mordo
Mrs. Patricia Mullins
Mr. Paul Mullins
Mr. Charles Munro
Mrs. Rosemary Nalbone
Mrs. Maureen L. Nappi
Mr. Ralph A. Nappi
Ms. Judith Niebur
Mrs. Ruth H. Norwood
Mrs. Elizabeth A. Perley
Mr. John Stephen Popeleski
Dr. Daniel J. Powsner
Ms. Phyllis L. Pullman
Mr. Martin Rabinowitz
Mr. John Raggio, Sr.
Mr. Gary Reed
Mr. Marc J. Reiss
Mrs. Arlene Richards
Mr. H. Richard Roberts
Mr. Edwin G. Roos
Mrs. Florence Rose
Mr. Robert Rose
Mr. Martin Rosenman
Mrs. Jodi Rosenthal
Mr. Robert D. Rosenthal

Mrs. Doris Rosman
Mrs. Adrienne Rosof
Dr. Bernard M. Rosof
Mr. Jack J. Ross
Mrs. Robin J. Ross
Mrs. Karen Rothman
Mr. Sheldon Rothman
Herbert Rubin, Esq.
Mr. Henry Salzhauer
Ms. Janice Sands
Mrs. Peggy Scherr
Ms. Janet Senecal
Mrs. Nancy S. Shea
Mr. Arthur Shorin
Mrs. Beverly Shorin
Mr. Burton Simon
Mr. John M. Simpson
Mrs. Marion B. Simpson
Ms. Mary Slavin
Mrs. Merry Slone
Mr. Richard Slone
Mrs. Margaret O. Small
Mrs. Joan Spiro
Ms. Joan Stein
Mrs. Lotte Steingart
Mr. Murray Steingart
Mr. Edward Stertz
Mrs. Frances Stertz
Mrs. E. Nancy Strausman
Mr. George Strausman
Mrs. Ellen Tuchler
Mrs. Mary D. Vessio
Mr. Nicholas F. Vessio
Mr. Frederick A. Volk
Mrs. Joan Wachtler
The Honorable Sol Wachtler
Mr. Paul E. Warburgh, Jr.
Mr. Robert W. Warburgh
Mrs. Pepi Weis
Mr. Gabriel Wiesenthal
Mrs. Shoshanna Wingate
Mr. Samuel H. Wolcott, III
Mr. Irving Zapinsky



**Feinstein Institute
for Medical Research**
Northwell HealthSM

The Feinstein Institute for Medical Research
350 Community Drive
Manhasset, NY 11030
516-562-FIMR (3467)
www.FeinsteinInstitute.org