

Weill Cornell Medicine

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Weill Department of Medicine

Annual Report 2019





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Cover Photos (top to bottom):

Dr. Ben-Gary Harvey, Division of Pulmonary and Critical Care Medicine. Dr. Harvey has launched a new program for Bronchoscopic Lung Volume Reduction (BLVR).

Dr. Robert Furler, Division of Infectious Diseases, investigates mechanical and metabolic influences of human CD4+ T cell differentiation. Along with Dr. Douglas Nixon, he studies mechanisms of HIV-1 latency and retroviral replication. He is viewing a time-lapse video of migrating T cells and macrophages which are cellular targets of HIV-1 infection.

Dr. Susana Morales, Division of General Internal Medicine, with trainees. Dr. Morales has championed numerous educational initiatives that have furthered the careers of underrepresented minorities in the field of medicine.



Dear Colleagues and Friends:

I am pleased to present to all of our friends and colleagues our Annual Report 2019. This report features news highlights from calendar year 2018 and provides an overview of our tripartite mission that encompasses patient care, research, and education.

It continues to be a great privilege for me to serve as the Chair of the Joan and Sanford I. Weill Department of Medicine. Founded in 1898, this department has upheld its tradition of excellence for well over a century, while advancing an impressive history filled with innovations and life-saving therapies.

Most importantly, the department continues to excel in providing high-quality clinical care, advancing state-of-the-art research, and in training our next generation of physicians and scientists. I am happy to report that there has been consistent evidence of growth in all of these areas. In addition, the department is continuing to focus on the careers of our faculty and trainees.

Inside this year's report, you will find examples of some of the wonderful work being done by our outstanding faculty, as well as a more detailed look at each of our divisions, awards received by members of the department, details on educational programs, and information on our administrative structure. You will also find metrics of growth covering clinical and research activities in what has been a superb year for the department.

I hope you enjoy the report!

Sincerely,

Anthony Hollenberg, M.D. Sanford I. Weill Chair of Medicine Joan and Sanford I. Weill Department of Medicine Weill Cornell Medical College

Physician-in-Chief NewYork-Presbyterian Hospital/Weill Cornell Medicine Center



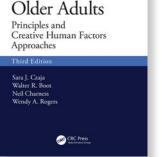
New Recruit Dr. Sara Czaja Leads New Center for Aging and Behavioral Research

Dr. Sara Czaja, an internationally recognized behavioral scientist with a background in engineering, has been recruited to the Division of Geriatrics and Palliative Medicine to serve as Director of the newly launched Center on Aging and Behavioral Research at Weill Cornell Medicine. Under Dr. Czaja's direction, the new center is achieving major breakthroughs in research in applied

gerontology. Advances at the center are rapidly creating a better quality of life for an ever-growing older population.

By 2040, it is estimated that 80 million people (or 21%) in the U.S. will be over the age of 65.

"Life doesn't stop at age 65," says Dr. Czaja, who is an author of the groundbreaking book, *Designing for Older Adults: Principles and Creative Human Factors Approach.* Geared towards the design community, the book has chapters on the characteristics of older adults, basic principles of design, and how to better involve



Designing for

older adults in design research. Dr. Czaja's research has shown that the older population does not fit the model that assumes they can't text, email, figure out Facebook, or find information online. Dr. Czaja, who has studied many hundreds of older individuals, is happy to report that the age of the oldest person she has seen using technology with great success is 98 years.

Dr. Czaja, Professor of Gerontology in Medicine, uses technology to facilitate the performance of older workers, to assist dementia caregivers, to enable older adults to use e-health apps and the Internet, and to support memory and social connectivity. A member of the National Academy of Sciences Committee on Human Systems Integration, Dr. Czaja is the founder and has been the Director of CREATE (Center for Research and Education on Aging and Technology Enhancement) for more than two decades. CREATE is an NIH-funded and multi-university collaboration dedicated to expanding the use of technology among older adults. As Director of CREATE, Dr. Czaja leads many collaborative studies that are delivering practical benefits for older people. A hallmark of her research has been the user-centered design process, which involves older adults in the design process to help ensure new systems in a way that allows them to reach their highest potential.

PRISM (Personal Reminder Information & Social Management), a supplemental grant of CREATE, is focused on older people who have MCI (Mild Cognitive Impairment); 33% of this study are over the age of 80. Currently in the second phase of investigation, PRISM involves many collaborations and locations including assisted living facilities in Miami, senior housing in Illinois, rural areas, and New York City. PRISM is a software system designed by the CREATE team to support memory, social connectivity, access to resources, and new learning. It is available in both English and Spanish.

"One of the most important aspects of PRISM," explains Dr. Czaja, "is that we have involved older people in the design of PRISM. We got input regarding what works for them and what is challenging. They helped, for example, to suggest meaningful content for the features."

Dr. Czaja has also been a major contributor to the REACH trial, the nation's largest caregiver intervention trial that focused on the chronic stress associated with dementia caregiving. "Caregivers can benefit from technology that can support caregiving activities, such as learning about caregiving skills and the daily life activities,"

"There are so many opportunities for collaboration including here on the medical campus, Cornell University in Ithaca, the Westchester

says Dr. Czaja. Those daily activities include dealing with prescriptions and obtaining medications, booking a ride, food deliveries, and more. Another line of study that Dr. Czaja is investigating focuses on older adults and financial exploitation. In collaboration with the University of Pittsburgh, this NIH-funded fiveyear study explores the factors and variables that predispose older adults to financial exploitation with the goal of developing a targeted intervention. Dr. Czaja is examining a host of factors including social support, cognitive abilities,

Dr. Sara Czaja

Campus, and

Roosevelt Island."

education, literacy, and numeracy in relation to susceptibility to financial exploitation. At the study's completion, Dr. Czaja and colleagues will establish a baseline model that will lead to interventional tools and training.

Since her arrival in 2018, Dr. Czaja has been working within many areas of medicine and science on the Weill Cornell campus. In addition to her work in the Division of Geriatrics and Palliative Medicine, she has interacted with neurology, public health, and the HIV clinic. She has also covered an enormous swath of territory throughout New York City, having already visited all five boroughs. "There is more opportunity for growth in multidisciplinary areas and in science here at Weill Cornell. There are so many opportunities for collaboration including here on the medical campus, Cornell University in Ithaca, the Westchester Campus, and Roosevelt Island," says Dr. Czaja.

In addition to pursuing new collaborations in research, what is a typical day for Dr. Czaja? Meeting with Ph.D.'s and statisticians, writing new grants, interfacing with computer companies, lecturing to trainees, and mentoring junior faculty. Based on the concepts in her book, which recently won the Richard Kalish Innovative Publication Award from the Gerontological Society of



America, Dr. Czaja will be hosting a workshop on the Weill Cornell campus in October 2019. This workshop was previously presented in Germany where it attracted 65 attendees from around the world. And Dr. Czaja has a new book soon to be released, *Current and Emerging Trends in Aging and Work*.

Originally a native of Buffalo, New York, Dr. Czaja has enjoyed returning to the New York area. "I've been learning about the various programs here in New York and how best to work with the New York community," she says. "New York should be proud of the great services they have for older adults and how well it is coordinated." As part of community engagement, Dr. Czaja has established a community advisory board at the Center on Aging and Behavioral Research. The advisory board consists of a diverse group of programs from entities across New York. Their goal is to help the center meet the needs of the community and also facilitate the recruitment of patients into the center's studies.

With so many lines of research underway and many collaborations on the horizon, it is an exciting time for the Division of Geriatrics and Palliative Medicine.

Dr. Czaja received her B.S., M.S., and Ph.D. from the University of Buffalo in New York. She was recruited to Weill Cornell Medicine from the University of Miami where she was Director of the Center on Aging. Her honors include the Jack A. Kraft Award for Innovation from the Human Factors and Ergonomics Society, the Social Impact Award from the Association of Computing Machinery, and recently, CREATE was the recipient of the first American Psychological Association (APA) Prize for Interdisciplinary Team Research.



Dr. Ben-Gary Harvey Leads Successful Launch of New Bronchoscopic Lung Volume Reduction Program for Patients with Emphysema

A new program for Bronchoscopic Lung Volume Reduction (BLVR) has been successfully launched in the Division of Pulmonary and Critical Care Medicine, led by Dr. Ben-Gary Harvey who serves as the division's Director of Bronchoscopy and Procedure Services. The bronchoscopic endobronchial valve treatment represents a major advancement in the management of individuals with COPD because it is the first minimally invasive procedure to help emphysema sufferers breathe better without major surgery.

Dr. Harvey works with a multidisciplinary team to evaluate and carry out the procedure. The team includes Pulmonologists, Anesthesiologists, Chest Radiologists, Cardiothoracic Surgeons, Respiratory Therapists and procedural and ICU nurses. After individuals with COPD and emphysema with severe hyperinflation receive a thorough evaluation, a bronchoscopy is performed to deliver several one way valves. These valves are deployed in the airways of the most diseased,

The newly created space in the chest cavity can now be occupied by the healthier portions of the lung; **this results in improvement of breathing function, walking capacity and quality of life.** hyperinflated, and nonfunctional emphysematous portions of the lungs. The valves allow air and secretions to come out, resulting in atelectasis (closure of these parts of the lungs). The newly created space in the chest cavity can now be occupied by the healthier portions of the lung; this results in improvement of breathing function, walking capacity and quality of life.

This procedure was approved by the Food and Drug Administration (FDA) in the United States in the summer of 2018. The Pulmonary Division at Weill Cornell launched the BLVR Program in January of 2019. Currently, the procedure is being performed at the rate of one patient per month. Based on the number of patients being evaluated

on a weekly basis, continued growth of the program is expected over the upcoming months. Ongoing evaluations of the patients who have undergone the procedure thus far have demonstrated decreased dyspnea, increased walking capacity, and improved quality of life within weeks of achieving volume loss of the targeted area of the lung.

This innovative procedure is currently being offered at a limited number of medical centers across the United States. In New York, at this time, the Weill Cornell Medicine and Columbia University Medical Center campuses are the only locations who have performed this new and breakthrough procedure for lung volume reduction.

Dr. Nixon and Dr. Jones Bring Breakthrough Research on HIV/AIDS to the WDOM

Recruited from The George Washington University, longtime research collaborators Dr. Douglas Nixon and Dr. Brad Jones have brought breakthrough research on HIV/AIDS to the WDOM's Division of Infectious Diseases. Drs. Nixon and Jones are expanding the division's already strong standing in the field of HIV/AIDS, which has included a 30-year history of pioneering clinical trials for HIV/AIDS. Dr. Nixon serves as the Principal Investigator of an NIH-funded \$28 million grant in support of the Believe in a Cure Martin Delaney Collaboratory, and Dr. Jones is co-director on the project. The project includes a dozen other scientists from the U.S., Canada, Mexico, and Brazil. Drs. Nixon and Jones are driving multiple lines of research on HIV at their state-of-the-art laboratories located adjacent to each other in the Belfer Research Building. In particular, they are focused on ways in which HIV survives by evading the human immune system and on ways to harness the body's own defenses to eradicate HIV.



Dr. Nixon: A Paradox of Focus and Breadth

Dr. Nixon, who had served as the Chair of Microbiology, Immunology and Tropical Medicine at The George Washington University before being recruited to Weill Cornell Medicine, explains, "Science is about a paradox of focus and breadth. We teach young scientists to focus in on a particular question and to delve into that problem in-depth. But in order to make progress you must have a broad enough range of knowledge and be able to engage anyone who might help you with that problem and in different ways."

A role model for how to successfully network in the world of science, Dr. Nixon continually seeks out collaborators from disparate areas of research while keeping the door open to the unexpected. "I can bring my expertise to their expertise, and together we can find common ground," he says. As the Principal Investigator on a \$28 million NIH-funded five-year collaborative study, Dr. Nixon seeks out and draws from the expertise of colleagues from three key areas in science: mathematics, genetics, and biology. "At this time, our in-depth problem is how to cure HIV/AIDS, and there is no one magic trick to do that. We have to delve into it, but we must engage with as many colleagues from different areas as we can."

"Science has become very much teamwork," says Dr. Nixon. "I think in physics, for example, the model has been one of which groups of people working together are greater than the sum of each individual part. Biology has been more individualistic, but researchers in this field are now recognizing that putting people together who have different expertise provides a large research boost. None of us is an expert in everything, and it really helps to have people who are tackling a big problem to bring their own areas of expertise. It behooves us to come together and use the greatest collective expertise we can through collaboration. I may not be a geneticist, for example, but working with and learning from geneticists provides a new window on the problem."



Under the umbrella of his NIH-funded collaborative grant, Dr. Nixon oversees researchers who are located at many subsites. Many of these researchers had never worked together before and their findings have led to spin off grants, as well as to some surprising discoveries. "The study of HIV/AIDS has been a great teacher for many different areas of disease, including treatments for cancer," says Dr. Nixon, "and recently, my own group made a most surprising observation about schizophrenia."

It has already been established that for all human beings their DNA is comprised of 8% fossil viruses. These viruses, which are not dissimilar to the HIV infectious retrovirus, existed millions of years ago and were ultimately passed on from mother to child. Over time these viruses have become mutated, changed, and fixed inside of the DNA of human beings. "It is amazing to think that as human beings we are comprised of 8% of these types of viruses, and that part of the research was already known," explains Dr. Nixon. "What we discovered as our own finding, working with neuroscientists and psychiatrists, is that some of these fossil viruses appear to be woken up in schizophrenia. This is exciting from a biology perspective because there is a lot of science we can do now in terms of identifying potential biomarkers for schizophrenia and for developing potential new treatment targets."

While carrying out research on HIV, to discover a breakthrough on schizophrenia is certainly an unexpected and welcome discovery. "In the past, humans had been exposed to retroviruses not dissimilar from HIV tens of thousands of years ago," notes Dr. Nixon. "This shows the length of time we should be thinking of in science. The research we carry out goes far beyond the immediate."

Since his arrival to Weill Cornell Medicine, Dr. Nixon has been impressed by the opportunities for research collaborations across various fields of medicine. He has partnered with colleagues on HIV studies and other areas of virus research both on the Weill Cornell campus and outside. Collaborations include the areas of molecular immunology and immunotherapeutic strategies for HIV and other infections with Dr. Michel C. Nussenzweig, Head of the Laboratory of Molecular Immunology at The Rockefeller University, and, from the same laboratory, Dr. Marina Caskey; brain organoids with Dr. Howard A. Fine, a premier neuro-oncologist, Sandra and Edward Meyer Cancer Center and the Brain Tumor Center at New York-Presbyterian/Weill Cornell Medical Center; microbiome in HIV with Dr. David Artis, Director of the Jill Roberts Institute for Research in Inflammatory Bowel Disease and Director of the Friedman Center for Nutrition and Inflammation, Division of Gastroenterology and Hepatology, WDOM; and fossil viruses and SLE (Systemic Lupus Erythematosus) with Dr. Virginia Pascual, Director, Gale and Ira Drukier Institute for Children's Health at Weill Cornell Medicine/New-York Presbyterian Hospital, who is working on the molecular and genetic drivers of pediatric disease. These are some of the partnerships Dr. Nixon has formed since joining Weill Cornell and the list is growing.

Recently, the good news has been reported in the media that two individuals have been cured of HIV to date. Both patients, however, also had cancer, and the curing of their HIV was a planned but fortuitous result from the HIV resistant cells used to treat their cancers. "These cures have provided very welcome news," says Dr. Nixon. "But how do we get to a cure for anyone else who may have HIV is the question. Working collaboratively is allowing us to get closer to our ultimate goal – a full and complete cure for HIV/AIDS."

As the Nixon Laboratory seeks to find a full cure for AIDS, it is certain they will be making other collaborative discoveries along the way that will undoubtedly lead to new therapies in many other fields of medicine.

After obtaining his M.B.B.S. from Westminster Medical School, The University of London, London, UK, Dr. Nixon received a Master's Degree and a Ph.D. from Oxford University (United Kingdom). He served as the Chair of Microbiology, Immunology and Tropical Medicine at the George Washington University for five years and has held positions at The Rockefeller University, The University of California San Francisco and the Gladstone Institutes, and Oxford University. Dr. Nixon was elected a Scientist of the Elizabeth Glaser Foundation and is past chair of the NIH AIDS Vaccine Research Subcommittee. He has published more than 250 papers.

HIV/AIDS – Cure and Vaccine: Dr. Jones

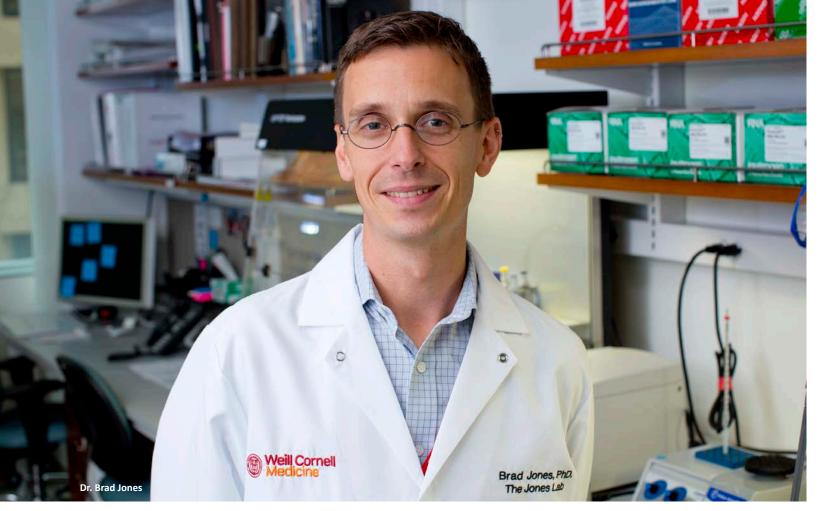
A global pandemic since the first clinical cases of AIDS were observed in the U.S. in 1981, HIV-AIDS has claimed more than 34 million lives to date. Dr. Brad Jones, a nationally and internationally recognized authority in the field of HIV-AIDS, was recently invited to give the plenary basic science lecture at the 22nd International AIDS Conference held in Amsterdam, the Netherlands, where he was tasked with conveying scientific findings to a lay audience. The event hosted more than 18,000 delegates from 160 countries,

Today, although antiretroviral drugs (ART) can contain HIV and suppress the virus in the blood to practically undetectable levels, **they cannot completely eradicate HIV from a person's body** – due to the persistence of viral reservoirs. including former President Bill Clinton, Prince Harry, celebrities, and many others who have dedicated their time to furthering awareness of HIV-AIDS, a syndrome that seeks to attack and destroy the immune system.

With 11,000 listeners in attendance, Dr. Jones's presentation provided an overview on the newest science in HIV regarding cure and vaccine and was geared to primarily non-basic scientists, clinicians, community members, and other stakeholders. "The challenge, which seemed rather

daunting at first, was to reasonably represent two broad fields of study (cure & vaccine) at a level that was both accessible to a lay audience and perceived as up-to-date and balanced by experts," says Dr. Jones. Dr. Jones was allotted 25 minutes to accomplish this goal, and as evidenced on Twitter, his efforts were extremely well received with numerous comments such as "the clearest talk on the subject of HIV cure and HIV vaccines I have ever heard."

Today, although antiretroviral drugs (ART) can contain HIV and suppress the virus in the blood to practically undetectable levels, they cannot completely eradicate HIV from a person's body - due to the persistence of viral reservoirs. For his talk, Dr. Jones concentrated on this HIV reservoir, which is the main



barrier to achieving HIV eradication. Known as HIV latency, this reservoir consists of HIV-infected cells that stay dormant and can remain undetectable for years, even decades, while ART is being administered. However, if antiretroviral drugs are discontinued, the virus will rebound from the reservoir.

Using the story of the little Dutch boy (representing ART) who plugs the overflowing dam with his finger until help arrives, Dr. Jones provided details on two lines of strategy: either drain the reservoir, or reinforce the dam. There is the option of sterilizing the reservoir (meaning draining and eliminating all infected cells in a person), or, alternately, strengthening the immune response so that the HIV-infected cells do not do damage. Sterilizing the reservoir with a process known as "kick and kill" was highlighted in Dr. Jones's talk, as well as the strengthening approaches of gene therapy, immunotherapy, vaccines, and more. Some surprises Dr. Jones uncovered included the size and the viral quality of the reservoir. He noted that the genetic material of the virus can be defective, and, in fact, at a rate of 98%. This illuminating fact has provided a portal in the dam for researchers to closely assess defective versus effective genetic material. Following this approach, explains Dr. Jones, is "faster and cheaper" in terms of analysis and provides a clear path to focusing in on infectious materials for clinical development.

Additionally, Dr. Jones proposed in his talk that investigations should analyze both blood and lymph nodes for HIV infection. It appears lymph nodes disproportionately affect development of the HIV-infected cells, he explained, and it has become an "aspirational goal" to identify lymph nodes and other tissues in the body that are involved. Other recent discoveries in the field show that HIV cells can clone themselves in the body – whether they be defective or intact. They can proliferate and increase, even when infected counts in the blood are not necessarily showing an increase. Dr. Jones emphasized that this is good news, as it reveals the reservoir is naturally rising and ebbing on its own because some of the cells are obviously killing themselves.

Dr. Jones also highlighted the future of clinical trials with approaches including cytotoxic T cells (that could kill HIV-infected cells); the use of antibodies to block infection of new cells; and the use of antibodies to bind to the surface of infected cells for the purpose of killing those cells off. He also noted there are broadly neutralizing antibodies that can bind to a very broad array of HIV; and these antibodies can literally see all the variations of HIV.

Dr. Jones covered these new scientific findings and more, while underscoring that a complete cure for AIDS is a "long-term goal" and that more "basic science research is needed to improve methods for targeting and measuring persistent sources of the virus."

Closing with an empowering message, Dr. Jones stated, "Just as HIV research has benefited other fields like cancer, the seeds of discoveries we are sowing now will drift into the future to form the basis of cures in the future."

An Assistant Professor of Immunology in Medicine in the Division of Infectious Diseases, Dr. Jones was recruited from the George Washington University where he had served as an Assistant Professor in the Department of Microbiology, Immunology and Tropical Medicine. He received his Ph.D. in immunology from the University of Toronto, where he studied the cellular immune response to HIV infection, and continued this work as a postdoctoral fellow at the Ragon Institute of the Massachusetts General Hospital, Massachusetts Institute of Technology and Harvard. Currently, he is focused on understanding how to maximally harness the "cytotoxic T-cell" arm of the immune system to contribute to the elimination of the HIV reservoirs that persist in individuals on long-term therapy.



Dr. Susana Morales (center) with trainees

Diversity Champion: Dr. Susana Morales Appointed to Director of the Weill Cornell Medicine Diversity Center of Excellence



Since her arrival to the Weill Department of Medicine in 1998, Dr. Susana Morales has championed numerous educational initiatives that have furthered the careers of underrepresented minorities in the field of medicine. An Associate Professor of Clinical Medicine in the Division of General Internal Medicine, Dr. Morales holds many leadership positions in the Weill Department of Medicine (WDOM) including as Vice Chair for Diversity and Associate Director of the Internal Medicine Residency Training Program.

In 2018, Dr. Morales became the Principal Investigator and Director of the Weill Cornell Medicine Diversity Center of Excellence (DCoE), a center that is funded by a \$2.7 million grant (over four years) from the Health Resources Services Administration Centers of Excellence (U.S. Department of Health and Human Services).

"Our population is becoming more diverse, but our healthcare professional population hasn't kept up," explains Dr. Morales. "Here at Weill Cornell Medicine, we are committed to increasing diversity. This grant in support of the Diversity Center of Excellence is exciting not only because there's potential to do a lot of good, but it also allows us to be a part of the institution's larger diversity efforts."



Under Dr. Morales's leadership, the newly established DCoE includes a Diversity Mentoring Cascade program that is cosponsored by the Office of Student Diversity at Weill Cornell Medicine (WCM) and by the WDOM. The program has brought innovative opportunities to support underserved groups as they work their way up training pipelines to secure successful careers in medicine. In partnership with WCM's Office of Diversity and Inclusion, the center has launched a collaborative two-year program, Faculty Development Circles, which aims to increase the retention and ascension of WCM faculty from underrepresented groups. An inaugural DCoE Pre-Medical Conference was held for undergraduate and gap year students from linkage schools. This conference, entitled, "Towards Health Equity and Beyond: Building a Career in Medicine," included a panel of individuals at different stages in the pipeline along with mentoring workshops. The mentoring workshops included student participants from Cornell University, Columbia University, Fordham College, Hunter College, St. John's University, and The City College of New York. Additionally, a new research fellowship program has been established with a focus on health disparities. And, on the horizon, is the creation of a Scholars in Health Equity Program that will encourage faculty to integrate health disparities into their courses and offer research training in health equity.

Recently, one of the most encouraging results of diversity efforts at Weill Cornell Medicine is the matching of 25% underrepresented minorities who were received into the Internal Medicine Residency Training Program (housed in the WDOM). This increase in underrepresented minorities is based on multiple factors, but, most certainly, it is a result of the many new programs emerging at the Diversity Center of Excellence.

Programs at the DCoE will continue to promote professional growth and development, influence diversity and experiences, create a supportive community for participants, and provide mentoring skills for all participants. "Mentorship will remain a key priority at the center," says Dr. Morales. "We will facilitate mentoring opportunities at every level, from pre-medical students to medical students, as well as residents and faculty members. I believe everybody needs at least one mentor in terms of navigating a career path."

New Clinical Programs for Cancer and Cardiology Benefit the Community

The NewYork-Presbyterian Brooklyn Methodist Hospital and the NewYork-Presbyterian Queens Hospital have been advancing new clinical programs that include collaborations with the Weill Department of Medicine (WDOM) in the fields of cancer and cardiology. New recruits and new lines of treatment are underway that are directly benefiting previously underserved populations in Brooklyn and Queens.

At NewYork-Presbyterian Brooklyn Methodist Hospital, all cancers are treated, but recent developments include an expansion into three new lines of clinical care: African-American women with breast cancer, African-American men with prostate cancer, and, in Asian populations, lung cancer due to smoking. These new cancer programs are targeted to four locations in Brooklyn: Flatbush, Crown Heights, Bedford Stuyvesant, and a cluster of other neighborhoods consisting of Gravesend, Brighton Beach, and Homecrest. Dr. Stephen J. Peterson, Chief of Medicine at NYP/Brooklyn Methodist Hospital, and colleagues have been meeting with community stakeholders in each of the four hubs within the Brooklyn community. As the clinical programs grow, new recruits are coming on board, including a female breast surgeon and other physicians specializing in breast cancer.

"Patterned after the Weill Cornell model," says Dr. Peterson, "it is expected that our already established general oncology practice at Brooklyn Methodist will soon include subspecialties in oncology. With a focus on precision medicine, we look forward to continued collaboration with Weill Cornell in terms of clinical expertise and research."

New advances on the clinical front at NewYork-Presbyterian Queens (NYP Queens) encompass both cancer care and cardiology. With assistance from Dr. David M. Nanus, former Chief of the WDOM's Division of Hematology and Medical Oncology, a new recruit, Dr. Gina Villani, has joined NYP Queens and is leading an oncology program that has been treating patients for more than a year. Dr. Joseph T. Cooke, Chief of Medicine at NYP Queens, notes that another advance for cancer is the recent creation of a new hybrid model of lymphoma care: patients are co-managed between the WCM lymphoma team and NYPQ allowing patients to have access to modalities not yet available in Queens.

"Our goals revolve around comprehensive cancer close to home with cutting-edge treatment modalities, as well as the enrollment of patients into clinical trials. A total of some 4,300 patient encounters are expected for the year 2019," says Dr. Cooke.

In the field of cardiology, with the support of Dr. Len Girardi and Dr. Bruce B. Lerman, Chief, Division of Cardiology, WDOM, a multidisciplinary center has been opened at NYP Queens that is identifying patients who would benefit from Transcatheter Aortic Valve Replacement (TAVR) or Mitra Clip. This advance coincides with the goal of developing a structural heart interventional program. Additionally, the recruitment of the hospital's first congestive heart failure specialist and the launch of a structural heart disease program is expected in 2019.



Fund for the Future Ushers in New Era in State-of-the-Art Research

Due to the generosity of Michael M. Kellen (Overseer, Weill Cornell Medicine) and his wife, Denise Kellen, and the Anna-Maria and Stephen Kellen Foundation, as well as the Iris Cantor Health Center, the newly established Fund for the Future award is supporting selected faculty during the crucial period of career development spanning completion of research training through the early years of their first faculty position held at Weill Cornell Medicine. Five winners in the Weill Department of Medicine, who are representative of the department's wide-ranging breadth of research, have been selected to receive Fund for the Future awards.

The winners are Kerri Aronson, M.D., (rising Instructor in Medicine) Division of Pulmonary and Critical Care Medicine; Miguel de Mulder, Ph.D. (Assistant Professor of Virology Research in Medicine), Division of Infectious Diseases; Vikas Gupta, M.D., Ph.D., (rising Instructor in Medicine), Division of Gastroenterology and Hepatology; Shashi Kapadia, M.D. (Instructor), Division of Infectious Diseases; and Ines Sherifi, M.D. (Assistant Professor), Division of Cardiology.

Dr. Aronson is studying patient-centered outcomes in interstitial lung disease and is focused on the development and validation of a disease-specific, health-related quality-of-life instrument (for use in both clinical practice and research) for patients with hypersensitivity pneumonitis. She obtained her M.D. at the State University of New York, Upstate Medical University, Syracuse New York, and completed residency training in Internal Medicine in the WDOM, during which time she served as a Chief Resident. She is currently a fellow in the WDOM's Division of Pulmonary and Critical Care Medicine.

Dr. de Mulder is studying the links between human endogenous retroviruses expression in the context of HIV infection and cancer. He earned his Ph.D. in Immunology and virology from the Universidad Complutense de Madrid, Spain while studying the patterns of HIV-1 drug resistance acquisition and molecular epidemiology in pediatric HIV cohorts. Dr. Gupta is performing postdoctoral research with a focus on understanding the mechanisms that generate and reverse hepatic fibrosis. After obtaining his M.D. and Ph.D at Duke University and completing residency training in internal medicine at Massachusetts General Hospital, Dr. Gupta pursued fellowship training at Weill Cornell to gain expertise in liver diseases.

Dr. Shashi Kapadia is conducting clinical and health services research on the equitable delivery of healthcare to people who use drugs, particularly related to hepatitis C and other infections. He is examining the uptake in hepatitis C treatment by primary care providers in New York State Medicaid and how this impacts treatment access. He completed an Infectious Diseases Fellowship, a Public Health and General Preventive Medicine Residency, and a Master's of Science in Clinical Investigation at Weill Cornell Medicine.

Dr. Sherifi is working on a project to produce a model of strain-stress analysis of the myocardium which can be used for refined assessments and prognostication in patients with aortic stenosis. A practicing cardiologist and a faculty member of the echocardiography and vascular imaging laboratories, Dr. Sherifi completed her undergraduate years at the Massachusetts Institute of Technology, majoring in Chemical Engineering, and subsequently studied medicine at the University of Toronto. She earned a Master's of Science Degree at the Université Paris Diderot in Paris, France in Science, Technologies and Health.

The Fund for the Future program provides an initial year of funding to the recipient with a total funding maximum of \$300,000. This funding is based upon academic progress and a competitive training award (such as an NIH K) application timeline within 18 months of initiation of the Fund for the Future support. Those winners who are currently fellows will be joining the faculty of the WDOM in July of 2019, which is a prerequisite of the Fund for the Future award.

Leadership



Anthony Hollenberg, M.D. Sanford I. Weill Chair of Medicine

Dr. Anthony Hollenberg is the Sanford I. Weill Chair of Medicine in the Joan and Sanford I. Weill Department of Medicine at Weill Cornell Medicine and the Physician-in-Chief at NewYork-Presbyterian Hospital. Dr. Hollenberg received his M.D. from the University of Calgary in Canada in 1986. He completed his Internal Medicine residency in 1989 and was Chief Resident in Medicine from 1990 to 1991 at the Beth Israel Hospital. Dr. Hollenberg then completed a fellowship in Endocrinology, Diabetes, and Metabolism at Massachusetts General Hospital in 1993 and was recruited back to Beth Israel to start his laboratory. From 2011 until his recruitment to Weill Cornell Medicine and NewYork-Presbyterian Hospital,

Dr. Hollenberg was Chief of the Division of Endocrinology, Diabetes and Metabolism, at Beth Israel Deaconess Medical Center and Director of Clinical and Translational Research Training Programs at Harvard Catalyst and Harvard Medical School where he was also a Professor of Medicine. Dr. Hollenberg's research focuses on the hormonal regulation of metabolism, with a particular emphasis on the role of thyroid hormone. His work has important ramifications for the regulation of body weight and metabolism. Additionally, The Hollenberg Lab focuses on understanding thyroid gland development and the possibilities for regenerative medicine. Dr. Hollenberg's many honors include the American Thyroid Association's 2018 Sidney H. Ingbar Distinguished Lectureship Award.

Robert Brown, M.D., M.P.H.

Vice Chair for Mentorship and Academic Development Vice Chair of Transitions of Care

Dr. Robert S. Brown, Jr. is the Gladys and Roland Harriman Professor of Medicine and Clinical Chief of the Division of Gastroenterology and Hepatology, as well as Vice Chair for Mentorship and Academic Development for the Department of Medicine. Dr. Brown is the co-founder and Director of the Center for Liver Disease and Transplantation at NewYork-Presbyterian Hospital. He has been part of the liver transplant effort at Weill Cornell part-time since 1999 and joined the faculty full-time in 2015. The liver transplant program gained Medicare approval in 2016 and has started living donor liver transplantation; the program is also pioneering laparoscopic living liver donation. Dr. Brown is heavily involved in clinical research on viral hepatitis, alcoholic liver disease, and liver transplantation. He received his B.A. from Harvard College, M.D. from New York University, and his M.P.H. from the Graduate School of Public Health, University of California, Berkeley. He completed his internship in medicine at Beth Israel Hospital, Harvard Medical School in



Boston, and a fellowship in gastroenterology and hepatology at the University of California, San Francisco. An internationally recognized expert in liver disease and liver transplantation, he has co-authored more than 175 peer-reviewed articles. He is an Associate Editor for *Hepatology* and *Gastroenterology and Hepatology* and published a book, *Common Liver Diseases and Transplantation: An Algorithmic Approach to Work-up and Management*. Dr. Brown is the recipient of a Young Investigator Award from the American Society of Transplant Physicians, the Senior Attending Teacher Award from Columbia University Medical Center, and the American Liver Foundation New York Chapter's Physician of the Year.





Robert Burakoff, M.D. Vice Chair for Ambulatory Services

Dr. Robert Burakoff, an expert in inflammatory bowel diseases (IBD), is Vice Chair for Ambulatory Services for the Weill Department of Medicine and serves as Site Chief for the Division of Gastroenterology and Hepatology at NewYork-Presbyterian Lower Manhattan Hospital and Weill Cornell Medicine. Dr. Burakoff was recruited from Brigham and Women's Hospital in 2017, where he had served as Clinical Chief of the Division of Gastroenterology and Director of the Center for Digestive Health, as well as Professor of Medicine at Harvard Medical School. He has served on the National Scientific Advisory Cabinet of the CCFA as Chair of the Editorial Board since 1985 and as Co-Editor in Chief of the Journal of Inflammatory Bowel Diseases. He was

named a Humanitarian of the Year by the NE Chapter of CCFA and was recently appointed Editor-in-Chief of Scientific American Medicine. He is also Chair of the editorial board of the National Scientific Advisory Cabinet of the Crohn's and Colitis Foundation of America (CCFA) and a past Chair of the American Gastroenterological Association's Advocacy and Public Policy Committee. He received his M.D. from Albany Medical College of Union University, served his residency at NewYork-Presbyterian/Weill Cornell, completed fellowships at Beth Israel Deaconess Medical Center and Harvard Medical School, and has a Master of Public Health in Health Policy and Management from Columbia University Mailman School of Public Health.

Joseph Cooke, M.D.

Chief of Medicine at NYP/Queens Vice Chair, WDOM

Dr. Joseph T. Cooke serves as the Chief of the Department of Medicine at NewYork-Presbyterian/ Queens and as Vice Chairman of the Weill Department of Medicine. Beginning with internship and residency, Dr. Cooke has had numerous roles in his 30 years at NewYork-Presbyterian Hospital/Weill Cornell Medicine. Before joining NewYork-Presbyterian/Queens, Dr. Cooke, an Associate Professor of Clinical Medicine and Public Health, was the department's Chief of the Division of Pulmonary and Critical Care Medicine, Chairman of the General Faculty Council, and Chief Quality and Patient Safety Officer for the NewYork-Presbyterian Hospital/Weill Cornell Medical Center. Board certified in internal medicine, pulmonary disease, and critical care medicine, Dr. Cooke is a fellow of the American College of Chest Physicians and the American College of Physicians. He earned an undergraduate degree in Biology with honors from New York University and obtained his M.D. from SUNY Downstate. He and Dr. Vlad Kvetan founded



and co-chaired the Critical Care Leadership Network of GNYHA (2006-2009). Currently, Dr. Cooke is the Treasurer for the Queens County Medical Society and continues to serve on the Medical Advisory Board for the New York Organ Donation Network. He had previously served on the Institute of Medicine's subcommittee on organ donation after cardiac death. In addition to earning numerous teaching awards at Weill Cornell, Dr. Cooke has been honored with the NYPH Physician of the Year Award, the New York Weill Cornell Center Alumni Council Award for Outstanding Service, and the Lorraine Tredge Award from HHC for leadership in quality and patient safety. At the 2008 HRSA National Learning Congress, he was named one of 11 national champions for his work in organ donation for NewYork-Presbyterian Hospital/Weill Cornell Medical Center.





Orli Etingin, M.D. Vice Chair for Faculty

Dr. Orli Etingin is the founder and Medical Director of the Iris Cantor Health Center at NewYork-Presbyterian/Weill Cornell Medical Center, a multidisciplinary group practice sponsored by the Departments of Dermatology, Medicine, Obstetrics and Gynecology, Radiology, Surgery and Urology. She is the Lisa and Sanford B. Ehrenkranz Professor of Clinical Medicine at Weill Cornell Medical College and serves as Vice Chair for Faculty in the Weill Department of Medicine. Dr. Etingin's clinical expertise is in internal medicine and coagulation disorders, such as blood clotting in pregnancy. Dr. Etingin received her undergraduate degree from Johns Hopkins University. After receiving her M.D. from Albert Einstein College of Medicine in New York, she completed residency training in Internal Medicine, subspecialty

training in Hematology-Oncology and a Chief Residency at New York Hospital - Cornell Medical Center. As the recipient of an NIH Clinical Investigator Award from 1987 to 1992, she conducted basic scientific research on thrombosis in vascular cells, leading to numerous publications in the journals *Cell, Biochemistry*, and *Journal of Clinical Investigation*. Dr. Etingin is listed in *Who's Who, Castle Connolly's Best Doctors Guides* and *US News Top Doctors*. She was the associate editor of the *Textbook of Women's Health*, a comprehensive manual for physicians in the field. A frequently invited speaker at women's health symposia, she has served as Moderator of the annual Women's Health Symposium at NewYork-Presbyterian Hospital since 1998 and as Moderator of the annual Women and the Brain Conference since 2006. Dr. Etingin is a member of the American Medical Women's Association and the American Medical Association. She is the editor of two nationally distributed newsletters, *Women's Health Advisor* and *Women's Nutrition Connection*, and a contributor to *Everyday Health*.

Kirana Gudi, M.D.

Vice Chair of Education

Dr. Kirana Gudi serves as Vice Chair of Education in the Weill Department of Medicine. As Vice Chair, she oversees a broad range of training programs and works closely with the department to advance its educational mission in furthering faculty development. Dr. Gudi is an Assistant Professor of Medicine in the Division of Pulmonary and Critical Care Medicine and is the Program Director of the department's residency training program in internal medicine. She received her medical training on the Weill Cornell campus beginning with an M.D. from Weill Cornell Medical College. She served as a Chief Resident and completed her residency training, as well as a fellowship in Pulmonary and Critical Care Medicine, at NewYork-Presbyterian Hospital/ Weill Cornell Medical Center. She maintains an active outpatient pulmonary practice, attends on the Inpatient Pulmonary Consult and the ICU Consult services, and is a passionate advocate of medicine and medical education.





Jennifer Lee, M.D. Vice Chair for Quality and Patient Safety (QPS)

Dr. Jennifer I. Lee serves as Vice Chair for Quality and Patient Safety (QPS) in the Weill Department of Medicine. An Associate Professor of Clinical Medicine and a hospitalist in the Division of General Internal Medicine, Dr. Lee's focus is the education of students, residents and faculty in quality improvement and safety science to ensure high quality, high value care delivery for patients in both the inpatient and outpatient settings. Her collaborations with the NewYork-Presbyterian Hospital's Division of Quality and Patient Safety, Weill Cornell Medicine Physician Organization QPS, and Weill Department of Medicine aim to align improvement efforts across the institution. She designed and co-chairs the department's Quality Improvement/Patient Safety (QIPS) committee and spearheaded the launch of Quality Improvement Academy, an advanced QI faculty

development program designed to provide a pathway for promotion for junior faculty in all clinical departments through academic achievement in quality improvement.

Board certified in internal medicine and pediatrics, Dr. Lee earned her M.D. degree from the State University of New York Buffalo School of Medicine and Biomedical Sciences, and completed her combined Internal Medicine and Pediatrics Residency at Mount Sinai Medical Center in New York City. She has completed training through Greater New York Hospital Association/United Hospital Fund's Clinical Quality Fellowship Program and Institute for Healthcare Improvement's Improvement Advisor professional development program among others. Her research interests include reducing readmissions, improving multidisciplinary care transitions and high value care. She has shared her work in QI education and readmissions at outside institutions on expert panels and grand rounds. She was awarded the AAMC Learning Health Systems Champion Research Award in 2014 and featured as the Research on Care Community's Member spotlight. Dr. Lee's work has been published in the *Journal of Hospital Medicine and Academic Medicine*, and she co-authored a white paper on the role of the hospitalist in care transitions with the New York Chapter of the American College of Physicians.

John Leonard, M.D.

Executive Vice Chair, WDOM

Dr. John P. Leonard is the Executive Vice Chair of the Weill Department of Medicine, a role in which he is advancing key educational and academic activities as well as other critical initiatives for the department. A nationally and internationally recognized authority on hematological malignancies, Dr. Leonard serves as the Associate Dean of Clinical Research at WCMC and leads the Joint Clinical Trials Office (JCTO) at WCM and NYP. The Richard T. Silver Distinguished Professor of Hematology and Medical Oncology, Dr. Leonard has pioneered the development of novel therapeutics in lymphoma, and he serves as one of the leaders of the national lymphoma clinical trials effort as leader of the Lymphoma Committee for the Alliance for Clinical Trials in Oncology (a part of the National Clinical Trials Network of the National Cancer Institute). Dr. Leonard has been an elected member of the American Board of Internal Medicine subspecialty board for Hematology and has also been elected to membership in the American Society of Clinical Investigation. He has served as Chair of the Scientific Advisory Board and Board Member of the Lymphoma Research Foundation and Board Member of



the Leukemia and Lymphoma Society/New York City Chapter. In 2017, he received the Miriam G. Wallach Award for Excellence in Humanistic Medical Care from New-York Presbyterian Hospital. Dr. Leonard has spearheaded many innovative initiatives in the Weill Department of Medicine to facilitate cutting-edge patient-oriented research.





Steven Lipkin, M.D., Ph.D. Vice Chair for Research

Dr. Steven M. Lipkin Professor of Medicine, Division of Gastroenterology and Hepatology, is the Vice Chair for Research. Dr. Lipkin works with departmental and divisional leadership to enhance and foster the research activities of our faculty and trainees. A nationally and internationally regarded leader in the field of adult genetics, he was recently elected as a Member of the American Society of Clinical Investigation. His research focuses on genetic testing for hereditary cancer disorders, including the Lynch Syndrome, Familial Adenomatous Polyposis, and Hereditary Pancreatic Cancer, among others. He is an authority on cancer genetic syndromes, with a particular emphasis on hereditary gastrointestinal cancer syndromes, and authored MAPP-MMR, a bioinformatic program that

is used to interpret whether Lynch syndrome missense variants are deleterious mutations or benign polymorphisms. Dr. Lipkin has more than 80 published papers in the top peer-reviewed journals and is the author of The Genome Generation: *Tales From the Front Lines of Genetic Medicine*, published in 2016 by Beacon Press. Dr. Lipkin has practiced at NewYork-Presbyterian Hospital/Weill Cornell Medical College since 2009. He trained in Internal Medicine at Duke University and in Medical Genetics at the National Human Genome Research Institute, where he performed post-doctoral work in the laboratory of Francis Collins, now Director of the NIH.

Susana R. Morales, M.D.

Vice Chair for Diversity

Dr. Susana Morales serves as the Vice Chair for Diversity in the Weill Department of Medicine. An Associate Professor of Clinical Medicine, Dr. Morales joined the Weill Cornell Medicine faculty in 1998. She serves as the Associate Director of the Housestaff Training Program in Internal Medicine and is the Director of the Education Core for the Cornell Center for Health Equity. In 2018, she became the Principal Investigator and Director of the Weill Cornell Medicine Diversity Center of Excellence. At Columbia Presbyterian Medical Center, Dr. Morales had previously served as Assistant Director for Education and Training in the Division of General Medicine. Dr. Morales has served as a member of the governing Council of the Society of General Internal Medicine (SGIM) and on the Advisory Boards of the Commonwealth Fund's "Bettering the Health of Minority Americans" program and the National Hispanic Medical Association. She is also a board member of both the United Hospital Fund and the Latino Commission on AIDS and has served on



the NYS Council on Graduate Medical Education. In 2017, Dr. Morales served on the NewYork-Presbyterian Hospital Disaster Medical Response Team in Puerto Rico.

Dr. Morales obtained her M.D. from the Columbia University College of Physicians and Surgeons and completed residency training in Internal Medicine at the Presbyterian Hospital of the City of New York. Her honors include: J. James Smith Memorial Award (presented annually by the Weill Cornell house staff); National Medical Fellowships Community Service Award; "Senior List" (selected by four graduating classes at Weill Cornell Medical College); Pioneers in Diversity/Bruce Laine Ballard M.D. Award for Excellence in Mentoring (presented by the Office of Faculty Diversity in Medicine and Science, Weill Cornell Medical College); Elnora M. Rhodes SGIM Service Award; and Hispanic Health Leadership Award from the National Hispanic Medical Association.





Stephen Peterson, M.D., M.A.C.P. Chief of Medicine, NYP/Brooklyn Methodist Hospital Vice Chair, Weill Department of Medicine

Dr. Stephen J. Peterson has been Chief of the Department of Medicine at NewYork-Presbyterian/Brooklyn Methodist Hospital and as a Professor of Clinical Medicine at Weill Cornell Medical College since August of 2013 and has been Vice Chair since April of 2018. He is also the Assistant Dean of Weill Cornell Medical College for the NYPBMH Campus. Dr. Peterson is certified by the American Board of Internal Medicine, and has a wealth of experience in the field of medicine. He is particularly renowned, however, for his basic science research in the field of obesity. He has over 120 publications in peer-reviewed journals and has been awarded the coveted titles of Master of the American College of

Physicians, Fellow of the American Heart Association, and Fellow of the New York Academy of Medicine. He is a former President of the New York Chapter of the American College of Physicians. Dr. Peterson is dedicated to teaching and has numerous teaching awards from four institutions over 35 years. He has been named in the 2017 and 2018 Top Doctor lists for Brooklyn, New York.

Judy Tung, M.D.

Chair of Medicine, NYP/Lower Manhattan Hospital

Dr. Judy Tung is the Chair of the Department of Medicine at the NewYork-Presbyterian/Lower Manhattan Hospital (NYP/LMH). She is also Section Chief of Ambulatory Medicine in the Division of General Internal Medicine. Dr. Tung obtained her M.D. from the Albert Einstein College of Medicine of Yeshiva University in 1997 and completed her internal medicine residency training at the University of California, San Francisco in 2000. She served for one year as a Chief Resident in Primary Care Internal Medicine at New York University before joining the faculty at NewYork-Presbyterian Hospital/Weill Cornell Medical College in 2001. Dr. Tung served as the Director of Weill Cornell Internal Medicine Associates (WCIMA) and as Interim Chief of the Division of Internal Medicine from 2009-2016. She has also held many other leadership positions at Weill Cornell, including Director of the Primary Care Residency, Associate Director of the Internal Medicine Residency, and Associate Chair of Educational Affairs. As a respected educator, Dr. Tung has received a J. James Smith Teacher of the Year Award, a Primary Care Teaching Excellence Award,



and she is on the Dean's List for teaching excellence. A leading expert in general internal medicine, Dr. Tung has spoken nationally on innovative models of primary care, including the Hospital Medical Home and the ambulatory teaching practice. Additionally, she is a champion for faculty development and teaches the Leadership in Academic Medicine Program (LAMP). Dr. Tung's life's work is the cultivation of individuals to their highest potential.



Thomas A. McGrath, M.B.A.

Chief Administrative Officer

Thomas A. McGrath, M.B.A., serves as the Chief Administrative Officer for the Weill Department of Medicine. Mr. McGrath directs administrative and business activities within the department, including finance, accounting, research administration, clinical operations, capital planning, ITS, academic appointments and education. Before joining Weill Cornell Medicine, Mr. McGrath served as Chief Operating Officer at the University of Miami Health System, Director of Finance and Administration for the Department of Medicine at Stanford University, and Vice President and UCH Officer of the Comer Children's Hospital at The University of Chicago. He holds a B.A. and an M.B.A. from the University of Illinois.

Honors & Awards

Research Awards

The Department of Medicine Young Investigators Award

This award is presented annually to members of the Department of Medicine below the rank of professor who perform on outstanding levels in the areas of clinical and/or basic biomedical research. Supported by the Michael Wolk Foundation.

Winner

Soo Jung Cho, M.D.

M.S.Topic: GLUT1-dependent Glycolysis Regulates Exacerbation of Fibrosis in Response to Secondary Streptococcal Infection Division: Pulmonary & Critical Care Medicine

Runners-Up

Molly McNairy, M.D., M.Sc.

Topic: Epidemic of Early Onset Hypertension in Haitian Slums Division: General Internal Medicine

Ilias Siempos, M.D., D.Sc.

Topic: RIPK3 mediates pathogenesis of experimental ventilator-induced lung injury Division: Pulmonary & Critical Care Medicine

The David E. Rogers Memorial Research Award

This award was established in 1995 to encourage medical residents to continue their investigative research in internal medicine. Four finalists are chosen to present their research at Medical Grand Rounds. The award was founded and is chaired by Holly S. Andersen, MD, Director of Education and Outreach at The Ronald O. Perelman Heart Institute (and Associate Attending Physician at NewYork-Presbyterian Hospital and Associate Professor of Clinical Medicine at Weill Cornell Medical College) and is funded by the Holly Andersen Heart Foundation.

Winner

Juan C. Osorio, M.D. Topic: Expression of Receptor-Interacting Protein Kinase 3 (RIPK-3) is Associated with Survival in Non-Small Cell Lung Cancer

First Runner Up

Alejandro Pino, M.D. Topic: Detecting RIPK3 Levels in Cerebrospinal Fluid of Patients Undergoing Endonasal Endoscopic Resection of Primary Brain Tumors

Finalists

Ayman Al Jurdi, M.D.

Topic: Clinical Outcomes of HIV-Infected Kidney Transplant Recipients Managed with an Early Corticosteroid Withdrawal Protocol

Christopher Jakubowski, M.D.

Topic: Risk of Venous Thromboembolism and Coagulation Factor Expression in Neuroendocrine Prostate Cancer

The Department of Medicine Annual Fellow in Research Award

Initiated in 2002, the Fellow Award in Research is presented annually to fellows within the Weill Department of Medicine who have presented outstanding research.

Winner

Charles Kyrlakos Vorkas, M.D.

Topic: Innate T cell responses to early Mycobacterium tuberculosis infection are defined by differential responses of MAIT and $\gamma\delta$ T cell subsets

First Runner-Up

Ghaith Abu-Zeinah, M.D.

Topic: The Clonal Architecture of Myeloproliferative Neoplasms (MPNs) Predicts Clinical Phenotype

Second Runner-Up

Marissa D. Rybstein, M.D. Topic: The Role of Autophagy in Anti-Tumor Immunity

Visiting Professors

Dr. Robert C. and Veronica Atkins Foundation Curriculum in Metabolic Disease Lecture January 17, 2018 Kristen Bibbins-Domingo, M.D., Ph.D. University of California

Sass Visiting Professor March 21, 2018 Michael Sadelain, M.D., Ph.D. Memorial Sloan-Kettering Cancer Center

The Richard T. Silver, MD Visiting Professor April 18, 2018 Mikkael Sekeres, M.D., M.S. Cleveland Clinic

Rogosin Institute Visiting Professor May 9, 2018 Ann Stepleton, M.D., F.A.C.P. University of Washington, Seattle

Feder Visiting Professorship October 31, 2018 Stuart Mushlin, M.D. Harvard Medical School



Ralph L. Nachman, MD Distinguished Visiting Professor November 14, 2018 Benjamin Ebert, M.D. Dana Farber Cancer Institute

Arthur Ashe Endowment-Christopher L. Barley, MD Lecturer December 12, 2018 Barney Graham, M.D., Ph.D. National Institutes of Health

Endowed Professorships

Dr. Ronald D. Adelman Emilie Roy Corey Professor in Geriatrics and Gerontology

Dr. Louis J. Aronne Sanford I. Weill Professor of Metabolic Research

Dr. David Artis Michael Kors Professor in Immunology

Dr. Phyllis August Ralph A. Baer Professor of Medical Research

Dr. Ann B. Beeder Jeanette and Jeffrey Lasdon Associate Professor of Clinical Public Health and Psychiatry

Dr. Julie Blander Gladys and Roland Harriman Professor of Immunology in Medicine

Dr. Carl Blobel (HSS) Virginia F. and William R. Salomon Chair in Musculoskeletal Research

Dr. Jon David Blumenfeld (Rogosin Institute) Maxwell Professor of Clinical Medicine **Dr. Robert Brown Jr.** Gladys and Roland Harriman Professor of Medicine

Dr. Lewis C. Cantley Meyer Directorship Endowed Chair Margaret and Herman Sokol Professor in Oncology Research

Dr. Mary E. Charlson William T. Foley Distinguished Professor in Medicine

Dr. Augustine M.K. Choi Stephen and Suzanne Weiss Dean Weill Cornell Medicine

Dr. David E. Cohen Vincent Astor Distinguished Professor of Medicine

Dr. Mary K. Crow (HSS) Joseph P. Routh Professor of Rheumatic Diseases in Medicine Benjamin M. Rosen Chair in Immunology and Inflammation Research

Dr. Ronald G. Crystal The Bruce Webster Professor of Internal Medicine

Dr. Andrew J. Dannenberg Henry R. Erle, MD-Roberts Family Professor of Medicine

Dr. Orli R. Etingin Lisa and Sanford B. Ehrenkranz Professor in Women's Health

Dr. Douglas Fearon Walter B. Wriston Professor of Pancreatic Cancer Research

Dr. Joseph J. Fins E. William Davis, MD Professorship of Medical Ethics **Dr. Richard R. Furman** Morton Coleman, MD Distinguished Professor of Medicine

Dr. Roy M. Gulick Rochelle Belfer Professorship

Dr. Barbara Hempstead O. Wayne Isom Professor of Medicine

Dr. Anthony N. Hollenberg Sanford I. Weill Chairman of the Department of Medicine

Dr. Julianne L. Imperato-McGinley The Abby Rockefeller Mauzé Distinguished Professorship in Endocrinology in Medicine

Dr. Lionel B. Ivashkiv (HSS) David H. Koch Chair for Arthritis and Tissue Degeneration Research Richard L. Menschel Research Chair

Dr. Elizabeth Leef Jacobson Ehrenkranz Family/Orli R. Etingin, MD Associate Professor in Women's Health

Dr. Warren D. Johnson, Jr.B. H. Kean Professor of Tropical Medicine

Dr. Yoon Kang Richard P. Cohen, MD Associate Professor of Medical Education

Dr. Harvey Klein The William S. Paley Professor of Clinical Medicine

Dr. Gary Koretzky Frank H.T. Rhodes Distinguished Professor in Cardiovascular Biology and Genetics

Dr. Mark S. Lachs The Irene F. & I. Roy Psaty Distinguished Professor of Clinical Medicine **Dr. John P. Leonard** Richard T. Silver Distinguished Professor of Hematology and Medical Oncology

Dr. Bruce B. Lerman Hilda Altschul Master Professor of Medicine

Dr. Steven M. Lipkin Gladys and Roland Harriman Professor of Medicine

Dr. C. Ronald MacKenzie (HSS) C. Ronald MacKenzie, MD, Chair in Ethics and Medicine

Dr. Fernando J. Martinez Bruce Webster Professor of Internal Medicine

Dr. Bassem M. Masri Daisy and Paul Soros/Recanati-Kaplan Family Assistant Professor in Preventive Cardiology

Dr. Ari Melnick Gebroe Family Professor of Hematology-Oncology

Dr. Henry W. Murray Arthur R. Ashe, Jr. Professor of Medicine

Dr. David M. Nanus Mark W. Pasmantier Professor of Hematology and Oncology in Medicine

Dr. Stephen A. Paget (HSS) Stephen A. Paget, MD, Chair in Rheumatology

Dr. Jean William Pape Howard and Carol Holtzmann Professor in Clinical Medicine

Dr. Alessandra B. Pernis (HSS) Peter Jay Sharp Chair in Lupus Research

Dr. Geoffrey Pitt Ida and Theo Rossi Distinguished Professor of Medicine

Dr. Holly G. Prigerson Irving Sherwood Wright Professor in Geriatrics

Dr. Shahin Rafii Arthur B. Belfer Professor in Genetic Medicine

Dr. M. Carry Reid Irving Sherwood Wright Associate Professor in Geriatrics and Gerontology

Dr. Linda Russell (HSS) The Anne and Joel Ehrenkranz Chair in Perioperative Medicine

Dr. Monika Safford John J. Kuiper Professor of Medicine

Dr. Jane E. Salmon (HSS) Collette Kean Research Chair

Dr. Ellen J. Scherl Jill Roberts Professor of Inflammatory Bowel Disease

Dr. Sergio Schwartzman (HSS) Franchellie M. Cadwell Chair

Dr. Manish Shah Bartlett Family Associate Professor of Gastrointestinal Oncology

Dr. Eugenia L. Siegler Mason Adams Professor of Geriatric Medicine

Dr. Harsimran Singh David S. Blumenthal Assistant Professor of Medicine **Dr. Kotha Subbaramaiah** Jack Fishman Professor of Cancer Prevention

Dr. Manikkam Suthanthiran Stanton Griffis Distinguished Professor of Medicine

Dr. Scott Tagawa Richard A. Stratton Associate Professorship in Hematology and Oncology

Dr. Harold E. Varmus Lewis Thomas University Professor of Medicine

Clinical Scholars

The Clinical Scholar Endowment is designed to provide outstanding junior faculty members in the Department of Medicine with financial support early in their careers. Support is provided specifically to help young physicians balance patient care with research and teaching. The awards allow junior faculty to make a commitment to academic medicine and, as a result, support promising new talent.

Dr. Eleni Andreopoulu Madeline and Stephen Anbinder Clinical Scholar in Hematology/Oncology

Dr. Leandro Cerchietti Raymond and Beverly Sackler Research Scholar

Dr. Jennifer Downs Friedman Research Scholar

Dr. James E. Ip Bruce B. Lerman Clinical Scholar **Dr. Robert J. Kaner** (through 7/2018) James P. Smith M.D. Clinical Scholar

Dr. Maria G. Karas Michael Wolk Heart Foundation Clinical Scholar in Cardiology

Dr. Laura Kirkman William Randolph Hearst Foundation Clinical Scholar in Microbiology & Infectious Diseases

Dr. Sonal Kumar Anne and Ken Estabrook Clinical Scholar in Gastroenterology

Dr. Veronica M. LoFaso Roland Balay Clinical Scholar

Dr. Peter Martin Charles, Lillian, and Betty Neuwirth Clinical Scholar in Oncology

Dr. Margaret L. McNairy Bonnie Johnson Sacerdote Clinical Scholar

Dr. Sonal Mehta Joachim Silbermann Family Clinical Scholar in Geriatric Palliative Care

Dr. Ana Molina Anne Moore M.D. Clinical Scholar in Hematology-Oncology

Dr. Karin-Elizabeth Ouchida Joachim Silbermann Family Clinical Scholar in Geriatrics

Dr. Sharda D. Ramsaroop Joachim Silbermann Family Clinical Scholar

Dr. Sarah Rutherford John P. Leonard, M.D./Gwirtzman Family Research Scholar in Lymphoma **Dr. Edward Schenck** (starting 8/2018) James P. Smith M.D. Scholar

Dr. Selin Somersan-Karakaya Nan and Stephen Swid Research Scholar

Dr. Amir Soumekh Linda Horowitz Cancer Research Foundation Clinical Scholar in Gastroenterology

Teaching Awards

(From Commencement 2019 – Weill Cornell Medical College)

The Leonard P. Tow Humanism in Medicine Award Dr. Anthony Ogedegbe

First Year Teaching Award Dr. Robert J. Kim

The Senior List

Dr. Juliet Aizer Dr. Samuel Ayala Dr. Amiran Baduashvili Dr. Pamela Charney Dr. Brian Eiss Dr. Ernie Esquivel Dr. Laura Greisman Dr. Bryan Leppert Dr. B. Robert Meyer Dr. Anthony Ogedegbe Dr. Mark Pecker Dr. Alice Tang Dr. Tanping Wong

The Charles L. Bardes, M.D. Teaching Prize Dr. Juliet Aizer

The Second Year Teaching Award Dr. Juliet Aizer Dean's Award for Excellence in Mentorship Dr. Arthur T. Evans

Siegel Family Faculty Award Dr. B. Robert Meyer

The National Academy of Medicine (NAM)

Dr. Jeremiah A. Barondess (NY Academy of Medicine - Emeritus) Dr. Lewis C. Cantley Dr. R. Gordon Douglas, Jr. (Emeritus) Dr. Joseph J. Fins Dr. Antonio M. Gotto, Jr. (Dean Emeritus) Dr. Gary A. Koretzky Dr. Ralph L. Nachman (Emeritus) Dr. Carl F. Nathan Dr. Jean W. Pape Dr. Andrew I. Schafer Dr. Harold E. Varmus

Association of American Physicians

Dr. Jeremiah A. Barondess (NY Academy of Medicine - Emeritus) Dr. Carl P. Blobel (HSS) Dr. Mary E. Charlson Dr. Augustine M.K. Choi Dr. Bayard D. Clarkson (MSKCC Affiliate) Dr. Ronald G. Crystal Dr. Andrew J. Dannenberg Dr. R. Gordon Douglas, Jr. (Emeritus) Dr. James A. Fagin (MSKCC Affiliate) Dr. Daniel Fitzgerald Dr. Michael Glickman (MSKCC Affiliate) Dr. Antonio M. Gotto, Jr. (Dean Emeritus) Dr. Roy M. Gulick Dr. Katherine A. Hajjar (secondary appt) Dr. Barbara L. Hempstead Dr. Anthony Hollenberg Dr. Julianne L. Imperato-McGinley Dr. Lionel B. Ivashkiv (HSS) Dr. Warren D. Johnson, Jr. Dr. Philip W. Kantoff (MKSCC Affiliate)



Dr. Attallah Kappas (Rockefeller Affiliate-Emeritus) Dr. Gary Koretzky Dr. Mary Jeanne Kreek (Rockefeller Affiliate) Dr. James Krueger (Rockefeller Affiliate) Dr. Ross L. Levine (MSKCC Affiliate) Dr. Fernando Martinez Dr. Ari M. Melnick Dr. Henry W. Murray Dr. Ralph L. Nachman (Emeritus) Dr. David M. Nanus Dr. Carl Nathan (secondary appt) Dr. Kenneth Offit (MSKCC Affiliate) Dr. Eric G. Pamer (MSKCC Affiliate) Dr. Geoffrey Pitt Dr. Marcus M. Reidenberg (Emeritus) Dr. Neal Rosen (MSKCC Affiliate) Dr. Jane E. Salmon (HSS Affiliate) Dr. Charles L. Sawyers (MSKCC Affiliate) Dr. Andrew I. Schafer Dr. David A. Scheinberg (MSKCC Affiliate) Dr. Wadi N. Suki (Baylor) Dr. Manikkam Suthanthiran Dr. Marcel R.M. van den Brink (MSKCC Affiliate) Dr. Thomas J. Walsh Dr. Babette B. Weksler (Emeritus) Dr. Marc E. Weksler (Emeritus) Dr. Jedd Wolchok (MSKCC Affiliate) Dr. Alastair J. J. Wood (Courtesy)

The American Society for Clinical Investigation

Dr. Omar Abdel-Wahab (MSKCC Affiliate) Dr. Abdul B. Abou-Samra (Hamad Medical Corporation Affiliate) Dr. Peter B. Bach (MSKCC Affiliate) Dr. John Blass (secondary appt – Emeritus) Dr. Richard S. Bockman (HSS Affiliate) Dr. Renier J. Brentjens (MSKCC Affiliate) Dr. Sarat Chandarlapaty (MSKCC Affiliate) Dr. Yu Chen (MSKCC Affiliate) Dr. Ping Chi (MSKCC Affiliate) Dr. Augustine M.K. Choi Dr. Bayard D. Clarkson (MSKCC Affiliate) Dr. David E. Cohen Dr. Ronald G. Crystal Dr. Andrew Dannenberg Dr. Luis A. Diaz, Jr. (MSKCC Affiliate) Dr. R. Gordon Douglas, Jr. (Emeritus) Dr. James A. Fagin (MSKCC Affiliate) Dr. Daniel W. Fitzgerald Dr. Edward Paul Gelmann (Columbia Affiliate) Dr. Michael S. Glickman (MSKCC Affiliate) Dr. Antonio M. Gotto, Jr. (Dean Emeritus) Dr. Roy M. Gulick Dr. Katharine A. Hajjar Dr. Barbara L. Hempstead Dr. Tobias M. Hohl (MSKCC Affiliate) Dr. Peter R. Holt (Rockefeller Affiliate) Dr. Katherine C. Hsu (MSKCC Affiliate) Dr. Lionel B. Ivashkiv Dr. Eric A. Jaffe (Adjunct) Dr. Richard N. Kolesnick (MSKCC Affiliate) Dr. Gary Koretzky Dr. James G. Krueger (Rockefeller Affiliate) Dr. C. Ola Landgren (MSKCC Affiliate) Dr. Jeffrey C. Laurence Dr. John P. Leonard

Dr. Ross L. Levine (MSKCC Affiliate)

Dr. Steven M. Lipkin Dr. Ari M. Melnick Dr. James K. Min (secondary appt) Dr. Henry W. Murray Dr. Thangamani Muthukumar Dr. Ralph L. Nachman (Emeritus) Dr. David M. Nanus Dr. Carl F. Nathan Dr. Douglas F. Nixon Dr. Kenneth Offit (MSKCC Affiliate) Dr. Eric G. Pamer (MSKCC Affiliate) Dr. Alessandra B. Pernis (HSS Affiliate) Dr. David N. Posnett (Emeritus) Dr. Shahin Rafii Dr. Marcus M. Reidenberg (Emeritus) Dr. Kyu Y. Rhee Dr. Arleen B. Rifkind (secondary appt) Dr. Charles M. Rudin (MSKCC Affiliate) Dr. Michel Sadelain (MSKCC Affiliate) Dr. Charles L. Sawyers (MSKCC Affiliate) Dr. Andrew I. Schafer Dr. David A. Scheinberg (MSKCC Affiliate) Dr. Kendall A. Smith Dr. David Solit (MSKCC Affiliate) Dr. Manikkam Suthanthiran Dr. Marcel R.M. van den Brink (MSKCC Affiliate) Dr. Alan M. Weinstein Dr. Babette B. Weksler (Emeritus) Dr. Marc E. Weksler (Emeritus) Dr. Jedd Wolchok (MSKCC Affiliate) Dr. Alastair J.J. Wood (Courtesy) Dr. Stefan Worgall (secondary appt)

CASTLE CONNOLLY TOP DOCTORS

(This list is based on an online search of Castle Connolly America's Top Doctors conducted as of March 2019 and does not include Castle Connolly metro listings. This list includes physicians who hold titles in the WDOM.)

Allergy & Immunology

Dr. Daniel A. Burton Dr. Michael J. Chandler

Cardiac Electrophysiology

Dr. Jim Cheung Dr. James Ip Dr. Bruce Lerman Dr. Steven M. Markowitz Dr. David J. Slotwiner (NYP/Queens) Dr. Gioia Turitto (NYP/Brooklyn Methodist) Dr. Miguel Valderrabano (Houston Methodist)

Cardiovascular Disease

Dr. Olakunle Akinboboye (NYP/Queens) Dr. Holly Andersen Dr. James A. Blake Dr. David S. Blumenthal Dr. Jeffrey S. Borer Dr. Robert D. Campagna Dr. Adam Deutsch Dr. Richard B. Devereux Dr. Hajir E. Dilmanian (NYP/Brooklyn Methodist) Dr. Timothy C. Dutta Dr. Jeffrey D. Fisher Dr. Kenneth W. Franklin Dr. Richard M. Fuchs Dr. Harvey L. Goldberg Dr. Kirsten O. Healy Dr. John F. Heitner (NYP/Brooklyn Methodist) Dr. Evelyn M. Horn Dr. John Tzu-Lang Hsueh (NYP/Queens) Dr. Lawrence A. Inra Dr. Mazen O. Kamen Dr. Robert J. Kim Dr. Paul Kligfield Dr. Karla M. Kurrelmeyer (Houston Methodist) Dr. John J. Mahmarian (Houston Methodist) Dr. Bassem M. Masri Dr. Ellen Mellow Dr. David H. Miller

Dr. Richard L. Mueller Dr. Sherif F. Nagueh (Houston Methodist) Dr. Martin R. Post Dr. Craig M. Pratt (Houston Methodist) Dr. Miguel A. Quinones (Houston Methodist) Dr. Miguel A. Quinones (Houston Methodist) Dr. Mary J. Roman Dr. Howard S. Rubin (Houston Methodist) Dr. Steven J. Siskind (NYP/Queens) Dr. Allison Spatz Dr. Theodore Tyberg Dr. Michael J. Wolk Dr. Hooman Yaghoobzadeh Dr. William A. Zoghbi (Houston Methodist)

Endocrinology, Diabetes, and Metabolism

Dr. Richard Bockman Dr. Edmun W. Giegerich (NYP/Brooklyn Methodist) Dr. Dale J. Hamilton (Houston Methodist) Dr. Lainie Hurst Dr. Barry J. Klyde Dr. Andrew J. Martorella Dr. Steven M. Petak (Houston Methodist) Dr. Richard J. Robbins (Houston Methodist) Joseph M. Tibaldi (NYP/Queens)

Family Medicine

Dr. George J. Kessler

Gastroenterology

Dr. Paul M. Basuk Dr. Robert S. Brown, Jr. Dr. Michael C. Cantor Dr. Bradley A. Connor Dr. Robert B. Cooper Dr. Gulchin A. Ergun (Houston Methodist) Dr. Howard Goldin Dr. Arnon Lambroza Dr. James D. Lax Dr. Susan L. Lucak Dr. Franklin Marsh, Jr. Dr. Paul F. Miskovitz Dr. Jerry Nagler Dr. Michel E. Nussbaum (NYP/Queens) Dr. James A. Rand (NYP/Queens) Dr. Moshe Rubin (NYP/Queens) Dr. Ellen Scherl

Dr. Michael J. Schmerin Dr. Felice Schnoll-Sussman Dr. Won Sohn (NYP/Brooklyn Methodist) Dr. Meyer N. Solny Dr. Donald N. Tsynman (NYP/Lower Manhattan) Dr. Arnold L. Weg Dr. Gil Weitzman

Geriatric Medicine

Dr. Ronald D. Adelman Dr. Mark S. Lachs Dr. Sonal S. Mehta Dr. Barrie Lynn Raik Dr. Bharathi Raman Dr. Eugenia L. Siegler Dr. George E. Taffet (Houston Methodist)

Hematology

Dr. Perry C. Cook (NYP/Brooklyn Methodist) Dr. Maria De Sancho Dr. John P. Leonard Dr. Ruben Niesvizky Dr. Raymond David Pastore Dr. Gail J. Roboz Dr. Andrew Schafer Dr. Koen W. Van Besien Dr. David J. Wolf

Hospice & Palliative Medicine

Dr. Cynthia X. Pan (NYP/Queens)

Infectious Disease

Dr. Barry Brause Dr. Ashley L. Drews (Houston Methodist) Dr. Victor N. Fainstein (Houston Methodist) Dr. Marshall J. Glesby Dr. David C. Helfgott Dr. Harold W. Horowitz (NYP/Brooklyn Methodist) Dr. Harold W. Horowitz (NYP/Brooklyn Methodist) Dr. Jonathan L. Jacobs Dr. Jason S. Kendler Dr. Chester W. Lerner (NYP/Lower Manhattan) Dr. Henry W. Murray Dr. Fernando A. Pujol-Morato (NYP/ Brooklyn Methodist) Dr. Sorana Segal-Maurer (NYP/Queens) Dr. Paul T. Smith Dr. Rosemary Soave Dr. Ole Vielemeyer

Internal Medicine

Dr. Monica Altman Dr. Louis J. Aronne Dr. Christopher L. Barley Dr. Mohammed B. Bashey (NYP/Brooklyn Methodist) Dr. Allan E. Beyda (NYP/Queens) Dr. Richard P. Cohen Dr. Symra A. Cohn Dr. Trenton R. Collier Dr. Arturo Constantiner (NYP/Lower Manhattan) Dr. Chad Michael Craig (HSS) Dr. Ward Cunningham-Rundles Dr. Howard Eison Dr. Orli Etingin Dr. Laura Lani Fisher Dr. Marina Gafanovich Dr. Flavia A. Golden Dr. Daniel Goldin Dr. Catherine C. Hart Dr. Len H. Horovitz Dr. Matteethra C. Jacob (Houston Methodist) Dr. Alan Bruce Kadet Dr. Keith LaScalea Dr. Meredith Lash-Dardia Dr. Michael R. Leonard Dr. Amy Lichtenfeld Dr. George Liu Dr. Bruce D. Logan (NYP/Lower Manhattan) Dr. Samuel J. Mann Dr. Jacqueline M. Mayo Dr. Parag H. Mehta (NYP/Brooklyn Methodist) Dr. Jennifer Meller Dr. Mark L. Meyer Dr. Shari Rochelle Midoneck Dr. Serena A. Mulhern Dr. Thomas Nash Dr. Deena J. Nelson Dr. Sonal Parr

Dr. Mark S. Pecker Dr. Arthur I. Radin Dr. Jill M. Rieger Dr. Todd L. Simon (NYP/Brooklyn Methodist) Dr. Rachel M. Smerd Dr. Anthony Somogyi (NYP/Queens) Dr. Adam R. Stracher Dr. Judy Tung Dr. Jessica Weiser-McCarthy Dr. Wendy S. Ziecheck

Interventional Cardiology

Dr. Douglas Ray Bree (Houston Methodist) Dr. Sorin Brener (NYP/Brooklyn Methodist) Dr. Neal S. Kleiman (Houston Methodist) Dr. Shing-Chiu Wong

Medical Oncology

Dr. Alan B. Astrow (NYP/Brooklyn Methodist) Dr. Himisha Beltran Dr. Jenny C. Chang (Houston Methodist) Dr. Morton Coleman Dr. Julian A. Decter Dr. David C. Dosik (NYP/Brooklyn Methodist) Dr. Howard A. Fine Dr. Robert M. Gelfand Dr. Yashar Hirshaut Dr. Nancy E. Kemeny Dr. Ana Molina Dr. David M. Nanus Dr. Allyson J. Ocean Dr. Mark W. Pasmantier Dr. Bonnie S. Reichman Dr. Joseph T. Ruggiero Dr. Scott T. Tagawa

Nephrology

Dr. Phyllis August Dr. Jon D. Blumenfeld Dr. Stuart Saal Dr. David Serur Dr. Bruce S. Spinowitz (NYP/Queens) Dr. Lawrence E. Stam (NYP/Brooklyn Methodist) Dr. John C. Wang Dr. Ruth L. Wintz (Houston Methodist) **Pulmonary Disease** Dr. David Berlin Dr. Lester W. Blair (NYP/Lower Manhattan) Dr. Clinton H. Doerr (Houston Methodist) Dr. Brian D. Gelbman Dr. Liziamma George (NYP/Brooklyn Methodist) Dr. Fabio Giron Dr. Daniel M. Libby Dr. Rameen M. Miarrostami (NYP/Brooklyn Methodist) Dr. Michael S. Niederman Dr. Anthony Saleh (NYP/Brooklyn Methodist) Dr. Abraham Sanders Dr. Eugene Shostak Dr. Sidney K. Stein Dr. Dana Zappetti

Rheumatology

(Hospital for Special Surgery) Dr. Juliet B. Aizer Dr. Dalit Ashany Dr. Anne R. Bass Dr. Doruk Erkan Dr. Theodore R. Fields Dr. Allan Gibofsky Dr. Susan M. Goodman Dr. Jessica K. Gordon Dr. Alana B. Levine Dr. C. Ronald MacKenzie Dr. Steven K. Magid Dr. Joseph A. Markenson Dr. Stephen Paget Dr. Edward Parrish Dr. Linda Russell Dr. Lisa R. Sammaritano Dr. Sergio Schwartzman Dr. Robert Spiera Dr. Richard Stern Dr. Hendricks H. Whitman III Dr. Arthur M. F. Yee

Sleep Medicine

Dr. Dianne M. Augelli Dr. Ana C. Krieger

Division Profiles

Weill Department of Medicine



Cardiology



Bruce B. Lerman, M.D. Chief, Maurice R. and Corinne P. Greenberg Division of Cardiology

Hilda Altschul Master Professor of Medicine

Professor of Medicine Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital The Maurice R. and Corrine P. Greenberg Division of Cardiology is a leader in cardiovascular research, education, and clinical care. The division's mission is to remain at the forefront of scientific and technological developments that are revolutionizing cardiology and to translate these findings to the clinical bedside. Our internationally renowned programs investigate the basic mechanisms of cardiovascular disease, including the genetics of heart disease, the cellular signals and transcription factors responsible for cardiac development, the transformation and homing of stem cells for myocardial regeneration, and the delineation of the molecular bases for cardiac arrhythmias. Strategies are continually implemented to enhance physical space, expand comprehensive clinical programs and continue our history of cutting-edge research. The division continues to develop and deliver cuttingedge therapies for heart disease and to advance clinical investigation. Expert faculty provide mentoring, training, and supervision to medical students, internal medicine residents, and fellows in cardiology, preparing them as tomorrow's leaders. The faculty also provide a host

of weekly conferences for internal and external colleagues.

From basic science, investigating the mechanisms of arrhythmias and large population-based studies of new diagnostic and therapeutic approaches, to a vast array of cardiovascular conditions and diseases, the focus is on improving patient care. This involves our faculty and all cardiology fellows-in-training, as well as postdoctoral trainees and graduate and medical students, thus creating a rich intellectual milieu in which trainees develop into experienced investigators.

Clinical services achieve superior outcomes in all areas, from interventional and imaging laboratories, to outpatient consultative and ongoing care. Patient care covers the full spectrum of heart and vascular diseases, including, but not limited to, arrhythmias, coronary and peripheral arterial disease, valve disease, inherited heart diseases, as well as heart failure and transplantation cardiology. To facilitate immediate treatment of patients presenting in the early stages of a heart attack, there exists 24-hour, in-hospital coverage of the Cardiac Intensive Care Unit, Telemetry and Step-Down Unit, and the interventional laboratory.



Dr. Lerman (center) with faculty from the division.



Dr. Lerman (center) with faculty from the division.

The division is particularly proud of its Cardiac Catheterization Laboratory and performance under the leadership of Dr. Shing-Chiu Wong. In the latest data published by the New York State Department of Health (year 2016), the Cornell Catheterization Laboratory had the lowest risk-adjusted mortality for percutaneous angioplasty for any laboratory in the state.

The division's faculty had a banner year for honors, administrative appointments, and other advances. Dr. Bruce B. Lerman, Division Chief, received the coveted Maurice R. Greenberg Distinguished Service Award, the highest honor bestowed by NewYork-Presbyterian Hospital/Weill Cornell Medical Center. Dr. Shing-Chiu Wong was named to the editorial board of Circulation: Cardiovascular Interventions. Dr. Dmitriy Feldman was elected to serve on the Board of Trustees for the Society for Cardiovascular Angiography and Interventions. Dr. Jim Cheung was appointed to Section Editor of the Journal of Cardiovascular Electrophysiology and also to the Heart Rhythm Society Clinical

Cardiac Electrophysiology Program Directors Subcommittee. Dr. James Ip was appointed to the ABIM Cardiac Electrophysiology Board Exam Writing Committee.

In 2018, the division inaugurated the Cornell Cardiovascular Outcomes Research Group under the leadership of Dr. Luke Kim and Dr. Jim Cheung. The division also started a Women's Heart program led by Dr. Nivee Amin and Dr. Alicia Mecklai.

Cardiology Fellowships

- Cardiology: three-year program that prepares highly qualified candidates for careers in investigative and clinical cardiology. Harsimran Singh, M.D., Program Director
- Clinical Cardiac Electrophysiology (CCEP): two-year training fellowship for intensive clinical training in mapping and ablation of complex arrhythmias. Jim W. Cheung, M.D., Program Director
- Interventional Cardiology: one-year advanced training fellowship in all areas of interventional cardiology, including drug eluting stents, rotational atherectomy, thrombectomy devices, distal protection devices and intravascular ultrasound. Robert Minutello, M.D., Program Director
- Advanced Heart Failure and Transplant Cardiology: 1-year training program in the management of the advanced congestive heart failure patient population. Irina Sobol, M.D., Program Director

Clinical Epidemiology and Evaluative Sciences Research



Mary E. Charlson, M.D. Chief, Division of Clinical Epidemiology and Evaluative Sciences Research

Executive Director, Center for Integrative Medicine

William T. Foley Distinguished Professor of Medicine

Professor of Medicine Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital



Dr. Charlson with trainees.

The Division of Clinical Epidemiology and Evaluative Sciences Research draws upon the talents and experience of a multidisciplinary group of faculty based at Weill Cornell Medicine, Cornell University-Ithaca, Cornell Tech, and other institutions. Faculty members are experts in qualitative and quantitative research methodology, health services research, clinical epidemiology, medical informatics, decision sciences, health disparities research, community-based participatory research, clinimetrics, outcomes research, behavioral science, and health education. They work together in a series of activities designed to encourage, and systematically support, the development of new research initiatives within, and outside, the division.

Research efforts in the division include a strong track record with the NIH and an ongoing commitment to fostering a

Health Services Research Fellowship

Mary E. Charlson, M.D. Fellowship Program Chair

Carol Mancuso, M.D. Fellowship Program Director

A two-year training program (T32 AHRQ Fellowship Program) that trains post-residency physicians to conduct methodologically rigorous health services research in a multidisciplinary environment. new generation of investigators via training grants and other opportunities. As leaders in population health research, the division plays a unique role at WCM through its contributions to behavioral, health disparities, and population health, and it has enrolled more than 3,000 patients in clinical research studies. The division provides national leadership in bending the cost curve by implementing innovative and evaluative strategies for population management focused on interventions in high comorbidity patients.

Related areas of investigation include studies to improve clinical outcomes, behavioral science research, research on complex patients with a significant burden of comorbidity, and comparative effectiveness. The division seeks to stimulate and support new clinical, health services, and outcomes research within and outside of Weill Department of Medicine. Divisional faculty lead graduate training programs in clinical epidemiology and research methodology. Graduates of the Master's program in Clinical **Epidemiology and Health Services Research** have received more than \$200 million in peer-reviewed funding. Faculty in the division continue to publish top tier research papers focused on improving outcomes of patients with chronic illness.

Endocrinology, Diabetes and Metabolism



Julianne L. Imperato-McGinley, M.D. Chief, Division of Endocrinology, Diabetes, and Metabolism

Associate Dean for Translational Research and Educational Medicine

Director, Clinical and Translational Science Center (CTSC)

The Abby Rockefeller Mauzé Distinguished Professor of Endocrinology in Medicine

Professor of Medicine Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital

As part of a world-class academic medical center, the Division of Endocrinology, Diabetes and Metabolism is dedicated to excellence in providing quality care to patients with endocrine and metabolic disorders; conducting promising research to advance the frontiers of endocrinology and diabetes; and training of highly motivated and dedicated physicians to become successful clinicians and physician-scientists. Division Chief, Dr. Julianne Imperato-McGinley, serves as the Principal Investigator of the Weill Cornell NIH-funded Clinical and Translational Science Center (CTSC), promoting translation of research from bed to bedside and to the community to improve public health.

Endocrinology provides the highest standard of care for patients with type 1 and type 2 diabetes mellitus. It offers a multidisciplinary team approach for diabetes care with comprehensive case management and the development of an individualized treatment plan. An



expert team is composed of diabetologists, certified diabetes educators, and registered dieticians who are experienced in intensive diabetes management, including insulin pump therapy. The division also has extensive experience in the management of gestational diabetes in patients with type 1 and type 2 diabetes mellitus. The division receives federal funding to support ongoing clinical research.

The division's areas of expertise in clinical care also include: general endocrinology; reproductive endocrinology, including the treatment of menstrual irregularities, hirsutism, and menopause; thyroid disease, with emphasis on thyroid cancer; disorders of calcium metabolism; and osteoporosis, metabolic bone disease and disorders of the pituitary and adrenal glands. Should surgery be necessary for the treatment of an endocrine disorder, we also have experienced endocrine surgeons.

The subspecialty program in Endocrinology, Diabetes and Metabolism is designed to provide the training and experience necessary to acquire all competencies critical to becoming an expert in this field. This comprehensive program fulfills the needs of trainees anticipating a clinical and/or basic endocrine research career in academia; those expecting to function as clinician-educators; and those interested in pursuing the clinical practice of endocrinology.

The division conducts promising stateof-the-art research to generate new knowledge and improve understanding with the ultimate goal of applying the latest scientific and medical advances for the prevention, detection, and treatment of patients with endocrine diseases. In 2018, Drs. Anthony Hollenberg, Marcus Goncalves, and Kristen Vella began their research in the state-of-the-art Belfer Research Building. Dr. Hollenberg, a physician-scientist, serves as Chair of the

L to R: Dr. Felicia Mendelsohn Curanaj and Dr. Aaron Schulman

Endocrinology, Diabetes and Metabolism

Weill Department of Medicine; his laboratory includes four NIDDK R01s. Dr. Hollenberg was the recipient of the Sidney H. Ingbar Distinguished Lectureship Award in 2018. Dr. Goncalves is a physician-scientist with grants from the NCI (K08) and the Lung Cancer Research Foundation.

The division's studies on diabetes include: The Epidemiology of Diabetes Intervention and Complications Trial (EDIC), a continuation of the multicenter Diabetes Control and Complications Trial (DCCT) evaluating the effect of intensive glucose control on both microvascular and macrovascular complications of diabetes, and The Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial, a multicenter study of the effects of intensive versus conventional glucose, blood pressure and lipid treatment

Endocrinology, Diabetes and Metabolism Fellowship

The Endocrinology, Diabetes and Metabolism fellowship is a joint program with NewYork-Presbyterian/Weill Cornell Medicine, Memorial Sloan-Kettering Cancer Center (MSKCC) and the Hospital for Special Surgery (HSS). It is a two-year training program accredited by the Accreditation Council for Graduate Medical Education (ACGME).

Aaron Schulman, M.D., Program Director

Associate Program Directors: Felicia Mendelsohn Curanaj, M.D. Stephanie Fish, M.D. Richard S. Bockman, M.D., Ph.D.

Obesity Medicine Fellowship

Leon I. Igel, M.D., Program Director

Associate Program Directors: Rekha B. Kuma, M.D., M.S. Katherine H. Saunders, M.D. Louis J. Aronne, M.D.

Research Director: Ipana Shukla, M.D. on cardiovascular disease in 10,000 individuals with type II diabetes mellitus. There is also a multicenter PERL study (Prevention of Early Renal Loss) in type 1 diabetes. Quality Improvement projects included standardizing and streamlining the Diabetic Ketoacidosis (DKA) Guidelines in the Weill Cornell Medical ICU and in the Lower Manhattan Hospital ICU, which is piloting a nurse-directed DKA protocol with insulin dosing guidelines.

Other major areas of research include: Clinical and Translational Science Center (CTSC), for which Dr. Imperato-McGinley serves as the Principal Investigator and Program Director of Weill Cornell Medical College's \$46 million NIH-funded Clinical and Translational Science Award (CTSA) that has been recently renewed. In honor of Dr. Imperato-McGinley's CTSC renewal, Dean Choi hosted a celebration in the Griffis Faculty Club on March 1, 2018. Studies also include Molecular Genetics of Male Sexual Differentiation and Development with foci on defining the genetic defects of subjects with inherited conditions affecting male sexual differentiation, particularly subjects with 5α -reductase-2 deficiency.

The Comprehensive Weight Control Center, located at 1165 York Avenue in Manhattan, is directed by Dr. Louis J. Aronne, Professor of Clinical Medicine and the Sanford I. Weill Professor of Metabolic Research. Dr. Aronne and the staff of six endocrinologists, nutrition, and obesity medicine specialists have developed and provide a unique form of "weight-centric" patient care to achieve weight loss in complex cases, which has provided the clinical foundation for the field of Obesity Medicine. The research staff runs clinical trials on the management of obesity and metabolic disease with diet, medication, and novel devices, and has fostered collaborations with multiple divisions and departments at WCM to develop cross-discipline treatment and research programs. The center published 22 peer-reviewed publications and three book chapters in 2018. The center trains students at all levels, and mentors Master's students from the Institute for Human Nutrition. Columbia University, and WCMC medical students pursuing research experience.

Gastroenterology and Hepatology



David E. Cohen, M.D., Ph.D. Chief, Division of Gastroenterology and Hepatology

Vincent Astor Distinguished Professor of Medicine

Professor of Medicine Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital The Division of Gastroenterology and Hepatology provides outstanding patient care in a wide range of subspecialty areas, including hepatology, inflammatory bowel disease (IBD), gastrointestinal reflux disease, advanced endoscopic diagnostic and therapeutic procedures, functional bowel disorders, gastrointestinal infections and gastrointestinal cancer prevention and treatment. The division houses the Jay Monahan Center for Gastrointestinal Health, the Center for Liver Disease and Transplantation, and The Jill Roberts Center for Inflammatory Bowel Disease. There is also a pancreas program. Patient care addresses the prevention and treatment of viral and alcoholic hepatitis, fatty liver, obesity, gastrointestinal cancers, Barrett's esophagus, IBD, disorders of gastrointestinal motility, pancreatic lesions, gastrointestinal diseases, and more.

Numerous research projects and clinical trials are underway. Dr. David E. Cohen, Division Chief, is world-renowned for leading the frontiers of molecular regulation of nutrient metabolism and energy homeostasis by membrane lipids. His seminal advances in research are directly benefiting the clinical setting with a focus on obesity-related liver disease. Dr. Robert S. Brown, Jr., the division's Clinical Chief, continues to direct a robust liver transplant program. The Center for Liver Disease and Transplantation combines the Liver Transplantation program and the general hepatology program within the division, as well as the Liver Transplant Surgery Division of the Department of Surgery. This interdepartmental program has laid the foundation for a comprehensive hepatology

Gastroenterology and Hepatology Fellowship

Carl Crawford, M.D. Program Director

A three-year program that focuses on specialized rotations and research, including opportunities to participate in clinical research (e.g., hepatology, inflammatory bowel disease, cancer screening, endoscopic ultrasound, the microbiota of the GI tract, endoscopic imaging techniques). We continue to recruit top candidates nationally and our fellows are pursuing academic careers in hepatology, advanced endoscopy, IBD, as well as other disciplines within gastroenterology. program at Weill Cornell Medicine with clinical trials in hepatitis B and C, fatty liver disease, and alcoholic hepatitis. Dr. Brown (in collaboration with Dr. Benjamin Samstein, Chief of liver transplantation and hepatobiliary surgery in the Department of Surgery at NewYork-Presbyterian/Weill Cornell Medical Center) received United Network for Organ Sharing certification in support of a "living donor" liver transplant program, thus expanding access to life-saving liver transplants for those in need.

Dr. Felice Schnoll-Sussman serves as Director of Endoscopy and of the Jay Monahan Center for Gastrointestinal Health. The Center offers a wide breadth of expertise including endoscopic ultrasound, capsule endoscopy, colorectal genetics, colon cancer prevention, endoscopic treatment of Barrett's esophagus, and esophageal motility. Dr. Reem Sharaiha, Director of Interventional Endoscopy, oversees the Endoscopic Bariatric Program, which provides the full spectrum of novel technologies related to endoscopic treatment of obesity. This advanced endoscopy group offers endoscopic suturing, confocal endomicroscopy for early detection of GI cancers, photodynamic therapy and radiofrequency ablation for pancreaticobiliary cancers, endoscopic drainage of pseudocysts, endoscopic necrosectomy and EUS-guided ERCP, and POEM (treatment of esophageal achalasia).

Dr. Sharaiha continues to perform a new noincision weight-loss procedure, ESL (endoscopic sleeve gastroplasty), that is bringing new hope for people who want to lose 40 pounds or more.

Dr. Sonal Kumar has initiated a multidisciplinary fatty liver disease and weight management clinic named the Innovative Center for Health and Nutrition in Gastroenterology (ICHANGE).

Dr. Robert Burakoff serves as the Vice Chair for Ambulatory Services for the Weill Department of Medicine at Weill Cornell Medicine and NewYork-Presbyterian/Weill Cornell Medical Center, as well as Site Chief for the Division of Gastroenterology and Hepatology at NYP/Lower Manhattan Hospital and Weill Cornell Medicine.

Gastroenterology and Hepatology

As of 2018, the division is providing state-of-theart patient care for IBD (Inflammatory Bowel Disease) in the newly opened David H. Koch Center on York Avenue that has 11 new high-tech endoscopy suites. This new center enabled the division to recruit 10 new faculty members: (Assistant Professor of Medicine) – Carolyn Newberry, M.D., AnnMarie Kieber-Emmons, M.D., Andrea Betesh, M.D., Akash Goel, M.D., Ravi Sharaf, M.D., Shrihari Mahadev, M.D., Saurabh Mukewar, M.D., Kartik Sampath, M.D., and Susana Gonzales, M.D.; and (Assistant Professor of Clinical Medicine) – Dana Lukin, M.D., Ph.D.

The Jill Roberts Institute for Research in Inflammatory Bowel Disease employs a multidisciplinary approach in translating scientific discoveries into new preventative and treatment strategies for IBD. The close collaboration between researchers at the Roberts Institute (Director. Dr. David Artis) and clinicians at the Jill Roberts Center for Inflammatory Bowel Disease (Director: Dr. Randy Longman) at Weill Cornell Medicine and NewYork-Presbyterian Hospital is enabling a trend towards more personalized treatment for IBD. The Jill Roberts Center is active in research studies focused on moderate to severely active Crohn's Disease and ulcerative colitis, eating patterns and disease activity in patients with IBD, and health care maintenance in patients with IBD.

Recruited from Stanford University, Dr. Chun-Jun Guo has joined the Jill Roberts Institute for Inflammatory Bowel Disease bringing research that is focused on the human gut microbiome. Dr. Guo's laboratory will use a combination of bioinformatics, bacterial genetics, metabolomics, and mouse models to identify the molecular mechanisms behind host-microbiome interaction.

Dr. Julie Magarian Blander, an expert on the innate immune system, continues to drive new research in IBD with funding from

the National Institute of Allergy and Infectious Diseases, National Institute of Diabetes and Digestive and Kidney Diseases, Burroughs Wellcome Trust Fund, and a Leukemia and Lymphoma Society Scholar Award. Dr. Andrew Dannenberg, Associate Director of Cancer Prevention, Sandra and Edward Meyer Cancer Center, continues to lead an investigation of a blood-based signature of fatty tissue inflammation in the breast. Funded by The Prevent Cancer Foundation, the goal of this study is to develop a blood test to identify women who are at increased risk of developing breast cancer and to hopefully elucidate the role of obesity in many cancers. Dr. Steven Lipkin, a human geneticist and the department's Vice Chair for Basic and Translational Resaerch, remains focused on biobanking initiatives and studies to identify genetic links to IBD and GI Cancers. Supported by a Kenneth Rainin Foundation Breakthrough Award, Dr. Iliyan Iliev, Assistant Professor of Immunology and Microbiology in Medicine, continued his research on the role of mycobiota during immunomodulatory therapy for inflammatory bowel disease (IBD). His studies are yielding critical insights in predicting and preventing IBD. Dr. Gregory Sonnenberg, Associate Professor of Microbiology and Immunology in Medicine, continues to advance critical research findings in his laboratory with a focus on the mechanisms that maintain a state of health in the human gastrointestinal tract.

It was a banner year for breakthrough publications and collaborations that included Division Chief, Dr. David E. Cohen's paper in *Nature Medicine* (in collaboration with Dr. Hongliang Li at

> the Wuhan University of China) on the anti-inflammatory enzyme CYLD as it relates to NAFLD (non-alcoholic fatty liver disease). Dr. David Artis, Director, Jill Roberts Institute for Research in Inflammatory Bowel Disease (in collaboration with Dr. Laurel Monticelli, Instructor of Immunology in Medicine, Division of Pulmonary and Critical Care Medicine) had been working on the creation of the first anatomical map detailing the distribution of innate lymphoid cells in tissues from previously healthy humans (published in Immunity).

Dr. Iliyan Iliev, Assistant Professor of Microbiology and Immunology in Medicine, published with Dr. Irina Leonardi (a postdoctoral fellow), pivotal findings in *Science* that have illuminated a strong connection between fungi, immunity, and intestinal inflammation that has suggested a new targeted treatment for IBD.



Heat map visualization of high (red) or low (blue) gene expression signatures of human innate lymphoid cells throughout the body. Image courtesy of Dr. Laurel Monticelli

General Internal Medicine



Monika Safford, M.D. Chief, Division of Internal Medicine

John J. Kuiper Professor of Medicine

Professor of Medicine Weill Cornell Medical College

Assistant Attending Physician NewYork-Presbyterian Hospital The Division of General Internal Medicine is home to the sections of Adult Internal Medicine, Hospital Medicine, Integrative Health, and the Research Group, and includes more than 300 employed and voluntary faculty. The division's tripartite mission is focused on providing compassionate, comprehensive, coordinated, and stateof-the-art patient-centered care for every patient through evidence-based practice; to educating the next generation of Internal Medicine physicians; and to generate new evidence on how to optimize the overall health and well-being of patients and communities via collaborative research. The division's multidisciplinary faculty is deeply committed to excellence and advancement in patient care via its Hospital Medicine, Adult Internal Medicine, and Integrative Health programs; resident and medical student education; and cutting-edge research.

Division Chief, Dr. Monika Safford, is an expert in diabetes, cardiovascular epidemiology and prevention, patientcentered care, and health disparities. She is the author of more than 450 peer-reviewed publications, receives ongoing funding from the National Institutes of Health and other sources, and has chaired several national meetings. She is the Founding Co-Director of the university-wide Cornell Center for Health Equity, which she leads along with Avery August, Ph.D., Vice Provost for Academic Affairs, Cornell University. She is the founder of the Patient Activated Learning System, a novel patient education platform being developed in collaboration with division and other college faculty members.

Dr. Judy Tung is the Division's Section Chief of Adult Internal Medicine (AIM) and Chair of the Department of Medicine at NewYork-Presbyterian/Lower Manhattan Hospital. The AIM program includes over 40 academic full-time members who provide high-quality and comprehensive primary care for a diverse group of patients representing a cross section of the ethnic, cultural, and economic diversity that is New York City. The program integrates faculty and trainee practices at locations on the Upper East Side (Weill Cornell Internal Medicine Associates [WCIMA]), in lower Manhattan, and in Long Island City, Queens. Services include preventive health care, treatment of acute and chronic illness, and coordination of care for those with medical



complexity. Regardless of insurance plan type, patients seen in the AIM practices are cared for by a cadre of outstanding health care providers. This Section is the primary hub for general medicine ambulatory education for the

Dr. Judy Tung

Internal Medicine Residency Training Program. Dr. Fred Pelzman, Associate Professor of Clinical Medicine, serves as the Medical Director of WCIMA and directs the division's Primary Care Innovations Program, a philanthropically funded initiative to increase innovation in primary care.

Dr. Arthur Evans is the Division's Section Chief of Hospital Medicine. The Hospital Medicine program includes 83 faculty members from around the country. All faculty are board certified in Internal Medicine and many have additional training and



subspecialty expertise (e.g., infectious disease, emergency medicine, nephrology, critical care, medical informatics, pain management, quality improvement, and clinical research). On any given day, the faculty provides care

Dr. Art Evans

for over 200 inpatients at both the Upper East Side and NewYork-Presbyterian/Lower Manhattan and Weill Cornell campuses. Physicians are responsible for the general medicine house staff service, medicine consult service, and medicine-orthopedics trauma service, and they oversee the medicine Physician Assistants service.

General Internal Medicine

The Section of Integrative Health and Wellbeing, led by Dr. Chiti Parikh and Dr. Alka Gupta, provides clinical services at the David H. Koch Center on the Upper East Side. Patients receive a whole person approach to medical care, offering comprehensive evaluation (e.g., laboratory testing and services such as acupuncture, massage therapy, nutrition counseling, yoga instruction, mindfulness coaching, and meditation instruction).

The division's Research Group is led by Dr. Safford, assisted by Associate Director for Research, Dr. Lisa Kern. The focus is on generating new evidence to optimize the health and functioning of people living with chronic diseases. There are studies on chronic



L to R: Drs. Deborah Estrin, David Satcher, Augustine M.K. Choi, Monika Safford, and Avery August at the 2018 Health Equity Symposium

disease prevention with attention to the elimination of health disparities and the care of vulnerable populations in the US and abroad. Funded programs include cardiovascular and cancer clinical epidemiology and population health, implementation science, behavioral interventions, and whole person care for patients with advanced chronic illness. The Research Group is funded by the National Institutes of Health, the Patient Centered Outcomes Research Institute, the Commonwealth Fund, the Robert Wood Johnson Foundation, American Heart Association, and private sponsors. New projects include: an epidemiology cohort being constituted in Haiti to study antecedents to a hypertension epidemic in young adults led by Dr. Margaret McNairy; the creation of a communitybased infrastructure for community-engaged research to eliminate health disparities in Brooklyn led by Dr. Erica Phillips; a study of deprescribing in older

adults led by Dr. Parag Goyal; studies of home health aides and health outcomes led by Dr. Madeline Sterling; fragmented ambulatory care associations with worse cardiovascular disease risk factor control overall and by race among cancer survivors and studies seeking to understand why African Americans delay total knee replacement surgery led by Dr. Iris Navarro-Millan. Ongoing studies are supported by the *REasons for Geographic And Racial Differences in Stroke (REGARDS)* study and the *Southeastern Collaboration to Improve Blood Pressure* Control implementation trial, both led by Dr. Monika Safford. The division hosts students and trainees to provide immersive mentored research experiences.

2018 ushered in new educational activities under the Diversity Center of Excellence HRSAfunded grant led by Dr. Susana Morales, Vice Chair for Diversity, WDOM. The Diversity Center of Excellence, funded under a four-year award from the Health Resources and Services Administration, is dedicated to increasing the number of minority physicians in academic medicine and plans to expand pipeline programs from middle school through undergraduates; enhance support for underrepresented minority medical students and trainees; expand faculty development for hiring and retention of underrepresented minority faculty; and generate new knowledge on how to achieve health equity. The Diversity Center of Excellence funds the activities of the NYC Education Core of the Cornell Center for Health Equity.

The division founded the Hospital Medicine Point of Care Ultrasound education and training program led by Dr. Tanping Wong and Dr. Gregory Mints (offered 2-3 times annually). The teaching faculty of the week-long training session span two hospitals and have taught ultrasound at the national level (ACP and SHM) and are involved in developing policy around HM-POCUS (sponsored by Society for Hospital Medicine). All core POCUS faculty have completed certification pathways by American College of Chest Physicians (ACCP) and/or Society of Hospital Medicine (SHM).

The Scholars Program (in its second year), led by Dr. Arthur Evans, selects 4-5 Scholars to participate in an intensive faculty development program, which fosters academic success and personal growth, focusing on five foundational skills: teaching, clinical



epidemiology, quality improvement, diagnostic bedside ultrasound, and leadership.

Training extends to faculty development with the *Leadership in Academic Medicine Program (LAMP)* directed by Dr. Judy Tung. The division's initiative, Quality University, continued to expand and grow beyond the WDOM. Led by Dr. Jennifer Inhae Lee, this program continues to select fellows competitively and teaches them principles of quality improvement and rigorous evaluation. Faculty members, Drs. Laura Gingras and George Bao, were part of the Quality University Class of 2018.

The division is home to the Patient Activated Learning System (PALS), a patient education webbased platform specifically targeted at populations with low health literacy. The development team of Drs. Monika Safford, Amanda Carmel, Fred Pelzman, and Sanjai Sinha, was joined by Dr. Laura Gingras in 2018. The PALS provides highly engaging, easily understood, conflict-free medical information for the lay public free of charge – *palsforhealth.com*. The PALS is being integrated into several research projects and curriculum development to optimize physician-patient communication.

Weill Cornell Medicine (featuring General Internal Medicine) was one of the institutions honored to participate in the #ProudtobeGIM campaign in 2018; the application to the event had been spearheaded by Dr. Judy Tung. On January 29, 2018, the division hosted a special event, "#ProudtobeGIM," held in Griffis Faculty Club with 115 attendees; it covered the full spectrum of General Internal Medicine programs with poster sessions and networking opportunities. The 2018 Cornell Tri-Campus Health Equity Symposium attracted more than 100 guests from the medical and technological sectors (co-directed by Dr. Monika Safford, along with Dr. Avery August, Vice Provost for Academic Affairs, Cornell University); guest speaker, former U.S. Surgeon General, Dr. David Satcher. The symposium explored health equity, from clinical research and basic sciences, to building academic community partnerships in support of scholarly projects. It was attended by Dr. Augustine Choi, Dean, Weill Cornell Medical College, and other distinguished members, and included remarks from President Martha Pollack and Dean Augustine M.K. Choi.

The division also launched a social media campaign in 2018 on Facebook and Twitter: @WCMGIM

Dr. Joseph Shin, Assistant Professor of Medicine and co-Medical Director of the Weill Cornell Center for Human Rights, received the 2018 Felix A. Fishman Award for Extraordinary Advocacy in the field of medicine. Dr. Ernie L. Esquivel was elected to the Council of the Clerkship Directors of Internal Medicine. Dr. Safford was selected to attend the Executive Leadership Academy in Medicine sponsored by Drexel University.

The Global Health Research Fellowship

Molly McNairy, M.D., M.Sc. Division of General Internal Medicine Program Co-Director

Daniel Fitzgerald, M.D. Center for Global Health Program Co-Director

This fellowship is tailored for post-residency graduates in internal medicine and seeks to train general internists for academic careers in global health research. It includes extensive field-based research in WCM programs based in Haiti, Tanzania, Brazil, and India, along with training in research methods, teaching and clinical service at NewYork-Presbyterian/Weill Cornell Medical Center.

Health Equity Research Fellowship

Dr. Martin Shapiro Program Director

A two-year research fellowship to train underrepresented minority physicians. Designed for physicians who wish to develop an extramurally funded independent research program focused specifically on health equity. Fellows complete a rigorous curriculum in clinical epidemiology and health services research and will obtain a Master of Science degree from the Weill Cornell Graduate School of Medical Sciences. Funded through the Diversity Center of Excellence, the first fellow has been selected to begin in 2019.

Integrative Health Fellowship

Alka Gupta, M.D. Co-Director

Chiti Parikh, M.D. Co-Director

A two-year fellowship designed to offer comprehensive education and hands-on experience in the field of Integrative Medicine. This program has accepted its first fellow.

Geriatrics and Palliative Medicine



Ronald D. Adelman, M.D. Co-Chief, Division of Geriatrics and Palliative Care

Medical Director, Irving Sherwood Wright Center on Aging

The Emilie Roy Corey Professor in Geriatrics and Gerontology

Professor of Clinical Medicine Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital



Mark S. Lachs, M.D., M.P.H. Co-Chief, Division of Geriatrics and Palliative Care

Director, Geriatrics for the NewYork-Presbyterian Health System

The Irene F. and I. Roy Psaty Distinguished Professor of Clinical Medicine

Professor of Medicine Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital

The Division of Geriatrics and Palliative Medicine is guided by a patient-centered culture of care. By integrating high-quality clinical care, the teaching of geriatric and palliative medicine, and scientific research, the division seeks to improve the quality of life for older adults and for patients of all ages facing chronic illness and end-of-life. The division also supports the networks of patient families and caregivers.

The Irving Sherwood Wright Center on Aging serves geriatric outpatients (average age over 80). The practice is structured to meet the complex needs of older adults, together with the needs of their families and other caregivers. Mental health professionals, geriatric nurse practitioners, social workers, and nutrition specialists complement the work of the geriatricians. The Wright Center excels in patient satisfaction scores within the Ambulatory Care Network of NewYork-Presbyterian Hospital. For elderly patients too frail to come to the Wright Center, comprehensive services are provided in the home through the EGL House Call Program.

Ten board-certified physicians in palliative medicine, along with an interdisciplinary team of nurse practitioners, social workers, and chaplains see adults of all ages in the inpatient and outpatient settings. Dr. Milagros Silva is Medical Director of the outpatient palliative care team, working closely with WCM oncologists, to address pain and other symptom management and wellness needs for chronically ill patients. Dr. Randi Diamond, Director of The Liz Claiborne Center for Humanism in Medicine, leads a bi-monthly palliative care case conference and narrative medicine groups, and has initiated a palliative care education partnership with St. Francis Naggalama Hospital in Uganda. The Palliative Care Champions Program trains nurses and social workers throughout NewYork-Presbyterian/ Weill Cornell Medicine.

Dr. Sara J. Czaja, recruited to the division in 2018, is leading the newly launched Weill Cornell Center for Aging and Behavioral Research. Internationally renowned for her research on aging and technology and caregiving, Dr. Czaja has received ongoing NIH funding since 1995. A co-author of the award-winning (Richard Kalish Innovative Publication Award from the Gerontological Society of America) book, Designing for Older Adults: Principles and Creative Human Factors Approach, Dr. Czaja will be hosting a workshop on the Weill Cornell campus in 2019 based upon the concepts in her book. She also has a new book soon to be released, entitled, Current and *Emerging Trends in Aging and Work.* Dr. Czaja has been rapidly forming productive collaborations and partnerships throughout the Weill Cornell academic community and the New York area since her arrival.

The Cornell Center for Research on End-of-Life Care, co-directed by Dr. Holly Prigerson, Irving Sherwood Wright Professor in Geriatrics, is home to numerous NIHfunded research projects focused on factors that promote informed decision-making and the receipt of value-consistent, more humane care of patients confronting death. Evidence derived from these studies informs the development of interventions to reduce suffering in seriously ill patients. With NIH funding, Dr. Prigerson's Center has developed and is beta testing the Memory Home – a webbased application where individuals can honor and memorialize a deceased loved one – and is Dr. Eugenia Siegler, Mason Adams Professor of Geriatric Medicine, continues developing and refining the HIV and Aging Program, together with Assistant Professor Dr. Tessa del Carmen, Roland Balay Clinical Scholar, and in partnership with the WCM's Center for Special Studies. The program offers multisite clinical care and patient support, and has expanded research



L to R: Risa Breckman, LCSW, and Dr. Mark Lachs

exploring the relationship between use of the Memory Home and grief intensity.

The NIA-funded Roybal Center, directed by Dr. M. Cary Reid, Irving Sherwood Wright Associate Professor in Geriatrics, investigates pain in later life and the role of palliative care in pain and symptom relief. Dr. Reid's competitive renewal application to continue his cutting-edge research was recently awarded another five years of grant funding from the National Institute of Aging. Drs. Prigerson and Reid also serve as co-PIs on a five-year T32 grant from the NIH; this grant prepares highly qualified M.D.'s and Ph.D.'s for successful careers in aging and palliative medicine research. in the field. This research has led to pivotal papers, including: *The Intersectionality of Stigmas among Key Populations of Older Adults Affected by HIV: a Thematic Analysis;* Dr. Megan Johnson Shen (lead author), Assistant Professor of Psychology in Medicine, and Dr. Siegler (co-author).

The division's NYC Elder Abuse Center (NYCEAC) is a leader in developing innovative and effective responses to elder abuse, neglect and exploitation through an unprecedented level of collaboration and coordination between government, non-profit agencies, and financial institutions. Headed by Division Co-Chief, Dr. Mark Lachs, The Irene F. and I. Roy Psaty Distinguished Professor of Clinical

Geriatrics and Palliative Medicine

Medicine, and by Risa Breckman, LCSW, Assistant Professor of Gerontological Social Work in Medicine, NYCEAC provides a streamlined and rapid response to elder abuse cases through its multidisciplinary teams (MDTs) and case consultations. Through its wide-reaching educational trainings, social media vehicles and weekly blogs, NYCEAC engages professionals around pertinent issues confronting the elder justice field and conducts research to develop innovative practices and policies to enhance their abilities to meet the many needs of older victims. NYCEAC recently added a first-of-its-kind in the country Helpline for family, friends, and neighbors who are assisting NYC-residing elder abuse victims.

NYCEAC has become a role model for elder justice services. With a three-year, \$4.5 million contract with the NYC Department for the Aging and generous funding from the New York State Office of Victim Services, NYCEAC has successfully launched expanded MDTs ("EMDTs") that provide case consultation services and training for professionals in all five boroughs. EMDTs have been so effective that, with \$8.4 million in state and federal funding, the Office of Victim Services and NYS Office for the Aging have partnered with NYCEAC and other elder abuse service organizations to bring EMDTs to every New York State county by the end of 2020. With initial funding from The New York Community Trust, NYCEAC has also developed the Interview of Decisional Abilities (IDA) tool to assist Adult Protective Services (APS) caseworkers to gather information to assess their clients' decision-making abilities related to elder abuse risks. Ms. Breckman oversaw the first two pilot phases of this project, which have been so successful that its results have attracted interest from around the U.S.

The division's faculty trains medical residents in geriatrics and palliative medicine. During their geriatrics rotations, medical residents make hospice and geriatrics house calls; accompany geriatric care managers on client visits; visit a nursing home, an independent living site, and other levels of senior housing; see an elder abuse shelter; present cases at weekly divisional meetings; and assist with the division's transitional care clinic, HIV/Aging program and the Wright Center's walk-in patients. Lenox Hill

Neighborhood House, a community partner, offers an opportunity for medical residents to talk with older adults in a non-clinical setting. Medical students participate in a Primary Care Clerkship, working alongside faculty members at the outpatient clinic, shadowing doctors and fellows in inpatient settings on the Acute Care for Elders (ACE) Unit and on Geriatric Consultation Rounds, and accompanying the EGL House Call team. The division hosts the Geriatrics and Palliative Scholarship (GPS) summer program through which selected students are immersed in clinical and didactic activities to deepen their understanding of the aging population. The student scholars also conduct research with a universal focus on aging, and culminate their research with presentations to the WCM community and at the American Geriatrics Society Annual Scientific Meeting.

A feature article in The New York Times highlighted one of the division's training programs for Weill Cornell medical students: Introduction to the Geriatric Patient. The article, "Every Older Patient Has a Story. Medical Students Need to Hear It," described how the training program enables students to learn first-hand about ageism in the medical field. As part of this program, developed by Division Co-Chief, Dr. Ron Adelman, Emilie Roy Corey Professor of Geriatrics and Gerontology, and by Associate Professor, Dr. Ronnie LoFaso, medical students are afforded the opportunity to talk with seniors about all aspects of their lives and to hear about examples of ageism that patients have experienced in the medical setting.

Geriatrics Fellowship

Karin Ouchida, M.D. Program Director

Sonal Mehta, M.D. Associate Program Director

The division houses a Geriatrics Fellowship, and jointly with Columbia University Medical College, a Hospice and Palliative Medicine Fellowship. Based in internal medicine and family medicine, the program includes numerous rotations, teaching opportunities, and a variety of quality improvement and clinical research initiatives.

Hematology and Medical Oncology



David M. Nanus, M.D. Chief, Division of Hematology and Medical Oncology (through end of May 2018)

Medical Director Genitourinary Oncology Program

Mark W. Pasmantier Professor of Hematology and Oncology in Medicine

Professor of Medicine Professor of Urology Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital

Director, NYPH-WCM Healthcare Services Cancer Program The Division of Hematology and Medical Oncology has 79 full-time faculty members who are dedicated to world-class patient care, scientific research and teaching. Within the division, the clinical services are comprised of Solid Tumor Oncology, Leukemia, Lymphoma, Myeloma, Stem Cell Transplant, and Non-Malignant Hematology. The six primary sites of operation are NewYork-Presbyterian Hospital (NYP) Main Campus (third floor), Weill Greenberg Ambulatory Care Building, Oxford Building, David H. Koch Center (fourth floor), the Myeloma Center at 425 East 61st Street, and New York-Presbyterian/Lower Manhattan. Faculty practices have grown at two additional network sites: NYP/Brooklyn Methodist and NYP/Queens. Each disease-specific program interacts closely with faculty in the corresponding surgical and radiation oncology departments, divisions and/or programs. In 2018, the division opened a Breast Center on the 4th floor of the new state-of-the-art David H. Koch Center on York Avenue; the center is carrying out interdisciplinary patient care with the Departments of Radiation Oncology and Surgery.

The Cancer Program at NYP/Weill Cornell Medical Center and NYP/Columbia Medical Center is consistently ranked as the number one cancer research program at an academic medical center in the New York metropolitan area by U.S. News and World Report. In 2018, the program ranked number 25 in the country for clinical cancer care. Each service contains disease-specific programs for research and clinical care. The Solid Tumor Service has active clinical and research programs in Breast Oncology, Gastrointestinal Oncology, Genitourinary Oncology, and Thoracic Oncology, with growing programs in Head and Neck Oncology and Endocrine Oncology. The Hematological Malignancies Program includes Leukemia, Lymphoma, Multiple Myeloma, and Stem

Cell Transplant Services, and the Richard T. Silver Myeloproliferative Neoplasm (MPN) Center. Within the Hematological Malignancies Program, there are several additional specialty programs, including the Chronic Lymphocytic Leukemia (CLL) Research Center, the Waldenstrom's Macroglobulinemia Program, and the Myelodysplastic Syndromes (MDS) Clinical Research Consortium.

Over \$28 million in new funding for cancer and blood disease research was received in 2018. This contributed to more than 100 active research projects in the division. Clinical research programs have enrolled nearly 600 people in approximately 125 interventional clinical trials. Under Dr. Evi Giannakakou's leadership, the division has a major emphasis on translational research, which originates in the Belfer Institute of Hematology and Oncology (Meyer Building) and the Belfer Research Building. The National Cancer Institute (NCI)-funded T32 Postdoctoral Training Program on Molecular and Translational Oncology Research (MTOR), co-led by Dr. Giannakakou offers a unique training opportunity for early career scientists interested in translational cancer research. Additionally, laboratory-based faculty are involved in the translational components of numerous clinical trials, working handin-hand with clinical researchers and using cutting-edge technology to address oncologic questions that impact patient care and outcomes. The division maintains a central role in the growth of the Meyer Cancer Center, working with its director, Lewis Cantley, Ph.D., to recruit basic science and translational researchers, and to work towards designation as an official NCI-designated matrix cancer center.

The Richard T. Silver, M.D. Center for Myeloproliferative Neoplasms (MPN), led by Scientific Director, Dr. Joseph Scandura, has novel research underway on neoplastic myeloid biology. The center has

Hematology and Medical Oncology

a clinical informatics platform, biorepository and web presence, and provides coordinated care for patients with MPNs and related nonhematologic complications. It was selected by the MPN Research Foundation Interferon (IFN) Initiative as one of only four partners uniting international experts in both blood and solid tumors. The Weill Cornell Clinical and Translational Leukemia Program, led by Dr. Gail Roboz, offers a variety of novel investigatorinitiated, cooperative group, and industrysponsored clinical trials in acute leukemia and myelodysplastic syndrome (MDS). The clinical care team runs one of the largest inpatient leukemia services in the country. The Myeloma Center leads in drug development, clinical trials, biology scholarship and translational research under the leadership of Dr. Ruben Niesvizky.

In 2018, the Bone Marrow and Stem Cell Transplant (BMT) Program, led by Dr. Koen van Besien, performed 168 autologous and allogeneic transplants, and 31 additional infusions, including immunotherapies such as CAR-T cells. The National Marrow Donor Program (NMDP), which oversees the largest public dataset related to bone marrow and stem cell transplantation, determined that out of the 50 largest centers in the U.S., this BMT Program takes on the most complex and challenging patients in the country. Dr. Peter Martin leads the Lymphoma Program, which continues to grow strategically; researchers are advancing high-impact clinical trials that provide

Hematology and Medical Oncology Fellowship

Ronald J. Scheff, M.D. Program Director

Adrienne Phillips, M.D. Associate Program Director

A three-year fellowship comprised of rotations through the inpatient and outpatient clinical subspecialty services at NYP/Weill Cornell Medical Center, as well as supervised basic, translational, and clinical research. The fellowship program has 16 ACGME fellows. therapy for various disease subtypes. The Non-Malignant Hematology Service and Center for Blood Disorders, led by Drs. Maria De Sancho and Raymond Pastore, unifies all non-malignant hematology practitioners under one roof and delivers state-of-the-art treatments for people with all types of blood disorders, including diagnostic testing and drug therapies.

The Breast Center's breast oncology program, led by Dr. Tessa Cigler, Clinical Director, and Dr. Eleni Andreopoulou, Research Director, delivers advanced treatment and comprehensive care for patients with all stages of breast cancer and those at increased risk for developing breast cancer. The center is accredited by the National Accreditation Program for Breast Centers (NAPBC). The triple negative breast cancer (TNBC) and survivorship programs continue to grow, along with the triple negative breast cancer registry and biobank. A research collaboration for patient-derived xenografts (PDX) to evaluate tumor behavior has been established. The Gastrointestinal (GI) Oncology Program, led by Dr. Manish A. Shah, continues to offer innovative clinical trials and multidisciplinary therapeutic options that continue to advance care across the spectrum of gastric, esophageal, pancreatic, colorectal, liver and other rare gastrointestinal cancers. The Genitourinary Oncology Program, led by Dr. Scott Tagawa, continues to grow and expand its clinical research portfolio and build on niche expertise in prostate specific membrane antigen (PSMA) targeted therapies. Dr. David Nanus and genitourinary oncology faculty in the division received a grant from the U.S. Department of Defense – one of only two such grants awarded in 2018 - to conduct critical prostate cancer clinical trials. In conjunction with this award, Weill Cornell Medicine, in collaboration with Columbia University Irving Medical Center and NewYork-Presbyterian Hospital, joined a prestigious national consortium, the Prostate Cancer Clinical Trials Consortium (PCCTC) comprised of 11 leading academic medical centers that conduct clinical and translational prostate cancer research. The



Thoracic Oncology Program continues to employ immunotherapies, targeted therapies, and other biological agents to treat lung cancer and is bringing better outcomes to patients. The Head, Neck and Endocrine Oncology Program unites diverse specialty medical cancer care and research expertise in partnership with the Department of Otolaryngology (ENT), Head and Neck Surgery and Oral & Maxillofacial Surgery & Dentistry.

2018 appointments and honors included: Dr. Barbara Hempstead, formerly the division's co-Chief and currently the O. Wayne Isom Professor of Medicine as well as a professor of neuroscience at Weill Cornell Medicine, was appointed as Dean of the Weill Cornell Graduate School of Medical Sciences; Dr. John P. Leonard, Richard T. Silver Distinguished Professor of Hematology and Medical Oncology and Associate Dean (Clinical Research) at Weill Cornell Medicine, was appointed to Executive Vice Chair of the WDOM; Dr. Dan Avi Landau, Assistant Professor of Medicine, won the Pershing Square Sohn Prize for Young Investigators in Cancer Research; and Dr. Manish A. Shah, Associate Professor of Medicine, became a Fellow of the American Society of Clinical Oncology (ASCO). Dr. Bishoy Faltas received a Starr Cancer Consortium Grant for the study of bladder cancer.

2018 was a banner year for new recruits with a wide array of specialized expertise: Dr. Cora Sternberg, M.D., genitourinary oncology and precision medicine; Doru Paul, M.D., Ph.D., head and neck oncology; Cheryl Mensah, M.D., non-malignant hematology; Lauren Elreda, M.D., hematology and oncology (NYP-Queens); Dawid Nowack, Ph.D., prostate cancer research; Marcia Paddock, M.D., Ph.D., non-malignant hematology; Uqba Khan, M.D., Gl oncology

On a sadder note, the division lost one of its esteemed faculty, Kristy Richards, PhD., M.D. An Associate Professor of Medicine in the division since 2015, Dr. Richards was a leading expert in the field of lymphoma. After a national search spanning several years, the Weill Department of Medicine (WDOM) is pleased to announce that Dr. Manuel Hidalgo will serve as Chief of the Division of Hematology and Medical Oncology effective June 1, 2019. Recruited from Harvard Medical School, Dr. Hidalgo is a premier physician-scientist in the areas of translational and clinical drug development



Dr. Manuel Hidalgo

and he has been at the helm of the early clinical development of more than 50 new anticancer agents. He is also an esteemed educator. Dr. Hidalgo succeeds Dr. David M. Nanus who has led the Division of Hematology and Medical Oncology since 2004. Dr. Nanus, the Mark W. Pasmantier Professor of Hematology and Medical Oncology, is now Director of the NewYork-Presbyterian and Weill Cornell Medicine Healthcare Services Cancer Program, a program unifying oncology and hematology clinical care and research at NewYork-Presbyterian's regional hospitals. Dr. Nanus is also the Associate Director of Clinical Services for the Meyer Cancer Center and will provide continued leadership throughout the NYPH/WCM network. With deepest appreciation, the WDOM thanks Dr. Nanus for his outstanding service that has brought the division to new heights in clinical care, education and research.

Infectious Diseases



Roy M. Gulick, M.D., M.P.H. Chief, Division of Infectious Diseases

Rochelle Belfer Professorship

Professor of Medicine Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital The Division of Infectious Diseases provides expertise in research, clinical care, and education and training. Internationally recognized physician-scientists conduct cutting-edge basic laboratory, translational, clinical, and epidemiologic research in infectious diseases in New York City and abroad. Research in the division investigates bacterial infections (including multidrug-resistant organisms), fungal infections, hepatitis B and C, HIV/AIDS, hospital-acquired infections, human papillomavirus (HPV), parasitic infections (Babesia, malaria), transplant/oncology infectious diseases, tuberculosis, and other viral infections (adenovirus, influenza, parainfluenza, rhinovirus). Additionally, the division provides both inpatient and outpatient infectious diseases clinical consultations, including at the Weill Cornell Travel Medicine service. Dr. Ole Vielemeyer, along with a roster of highly experienced physicians, provide care and advice for a broad range of infectious diseases and international travel issues.

The division's programs in laboratory, translational, and clinical research, remain robust. The Golightly Lab (Director: Dr. Linnie Golightly) is working on the pathogenesis of cerebral malaria, as well as a novel noninvasive, cell phone-based device to diagnose and determine the severity of malaria. The Kirkman Lab (Director: Dr. Laura Kirkman) studies drug-resistance mechanisms in malaria and, more recently, Babesia, a parasite

Infectious Diseases Fellowship

Kristen Marks, M.D. Program Director

A two to three-year training program that includes individualized training through clinical rotations, didactic course work, mentored research, and faculty guidance to develop the next generation of infectious diseases physicianscientists and academic clinicians. transmitted by ticks in the northeast U.S. The Rhee Lab (Director: Dr. Kyu Rhee) continues its highly innovative work on Mycobacterium tuberculosis (MTb) using novel mass spectrometry-based metabolomic approaches. The Walsh Lab (Director: Dr. Tom Walsh) investigates fungal pathogens and develops and tests newer antifungal strategies and treatments in laboratory experiments and animal models. The HIV Clinical Trials Unit (Director: Dr. Marshall Glesby, with co-investigators Drs. Grant Ellsworth, Roy Gulick, Kristen Marks, Mary Vogler, and Timothy Wilkin) conducts clinical research in the treatment and prevention of HIV infection, the treatment of hepatitis, and the assessment and treatment of human papillomavirus (HPV) infection. Dr. Catherine Small, Associate Director, Transplant/Oncology Infectious Diseases Program, along with co-investigators Drs. Alex Drelick, Priya Kodiyanplakkal, Markus Plate, Michael Satlin, Rosemary Soave, and Tom Walsh conduct cutting-edge clinical research in patients who have undergone organ transplantation or have cancer and develop infections.

Drs. David Calfee and Matthew Simon serve as the Hospital Epidemiologists for NewYork-Presbyterian Hospital. They are noted for their efforts in response to the recent measles outbreak, as well as day-to-day strategies to decrease hospital-acquired infections at NewYork-Presbyterian Hospital/Weill Cornell. The Center for Special Studies (CSS), the HIV primary care service, continues to provide care for over 2,500 HIV-infected patients and HIV prevention strategies for at-risk HIV-negative individuals. At NYP/Lower Manhattan Hospital, the inpatient and outpatient infectious diseases service and hospital epidemiology are thriving with the support of Drs. Lalitha Parameswaran and Harjot Singh; and at NYP/Brooklyn Methodist Hospital, the Division of Infectious Diseases is led by Dr. Harold Horowitz.



L to R: Dr. Douglas Nixon and Dr. Brad Jones

An NIH-sponsored T32 research training grant, "Research Training in Infectious Diseases" (Principal Investigator: Dr. Roy Gulick), continues to support training of developing infectious diseases physicianscientists through 2020. This grant supports fellows to conduct basic, translational, clinical, and epidemiologic research projects. Fellows study a wide variety of infectious diseases, currently including aging in HIV-infected patients, drugresistant bacterial infections, biomarkers of infection, and tuberculosis.

2018 was a banner year for new recruits and honors. Recruited from George Washington University, Dr. Douglas Nixon and Dr. Brad Jones have brought breakthrough laboratory research on HIV/ AIDS to the division. Their work will add

to the division's already strong standing of more than 30 years in pioneering cutting-edge clinical trials for HIV/AIDS. Dr Nixon serves as the Principal Investigator of an NIH-funded \$28 million grant in support of the Believe in a Cure Martin Delaney Collaboratory. Dr. Jones is a collaborator on the project that involves a dozen other scientists from Mexico, Canada, and Brazil. Drs. Nixon and Jones are driving multiple lines of research inside their laboratories in an effort to translate breakthrough findings into life-saving therapies for HIV/AIDS – and ultimately a cure. Dr. Thomas Walsh, Professor of Medicine, delivered the opening lecture for the 82nd Annual Southern California ASM (American Society of Microbiology) Meeting. Dr. Daniel W. Fitzgerald, Professor of Medicine, was elected to the American Association of Physicians.

Center for Global Health

The Center for Global Health's mission is to improve the health of people in resource-poor countries through health care, research, and training. Directed by Drs. Dan Fitzgerald and Warren Johnson, the center has 15 core faculty members and more than 50 collaborating faculty members from multiple WDOM divisions. The center has long-standing programs in Brazil, Haiti, Tanzania and India with research and training programs in cardiovascular disease, women's and maternal child health, and infectious diseases.



Center for Global Health's mission is to improve the health of people in resource-poor countries.

Cardiovascular disease is now the leading cause of death in the world. Drs. Molly McNairy and Jean Pape have launched an NIH supported communitybased cohort study of hypertension and other cardiovascular disease risk factors in slums in Port au Prince, Haiti. Preliminary data suggest that the rate of hypertension in young Haitians aged 18-30 is four-fold higher than in similarly aged blacks in the U.S. Hypertension in Haiti is not explained by obesity, thus WCM investigators are examining other poverty-related risk factors such as stress, lead toxicity, and poor diet. The ultimate goal is to identify factors that can be targeted for prevention interventions.

Drs Jyoti Mathad, Katey Walsh, Jennifer Downs, Myung Hee Lee and others conducted a multicenter study in the U.S., Haiti, India, and Tanzania on factors that influence whether women physicians become leaders in the global health field. Seventyfive percent of health care workers worldwide are women, but only 25% of the leaders in health care, such as deans of medical schools or ministers of health, are women. The results of the WDOM study, published in The Lancet, showed that 72% of women health care workers report challenges with work and life balance, 46% reported gender discrimination in the work-place, and 55% reported sexual harassment or assault. The study provided evidence for some practical interventions to improve retention of women, including peer mentoring, strict policies to address gender discrimination and sexual harassment, research enabling funds for junior faculty, and leadership training. These interventions are being implemented at the center's international sites with the enthusiastic support of their leadership.

Infectious disease research and training at the Center for Global Health has focused upon HIV and tuberculosis. Dr. Robert Peck initiated an NIH R01 supported clinical trial of a social worker intervention in Tanzania for HIV-infected people being discharged home from the hospital to improve their linkage to care and survival. Preliminary data suggest that having a social worker visit HIV infected patients at home after their discharge decreases mortality from 25% to less than 10% one year later. Dr. Kate Dupnik successfully competed for a prestigious Doris Duke Charitable Foundation Clinical Scientist Development Award to study the effect of active tuberculosis on the HIV reservoir.

In November 2018, the center's partner in Tanzania, the Weill Bugando School of Medicine, graduated their one-thousandth M.D. student. Weill Bugando opened in Mwanza, Tanzania in September 2003 to train physicians to provide health care in the underserved western part of the country near Lake Victoria. The medical school has been affiliated with Weill Cornell Medicine since its inception. Three Weill Cornell Medicine faculty-physicians are based at Weill Bugando (Drs. Peck, Downs, Kingery) and they teach both residents and medical students. An additional 50 physicians from Weill Cornell Medicine travel to Tanzania each year to teach in two-month blocks, and 15 Tanzanian residents come to New York for two months to receive advanced clinical training. The program is a model of international collaboration in medical education.

Medical Ethics



Joseph J. Fins, M.D., FACP Chief, Division of Medical Ethics

E. William Davis, Jr., M.D. Professor of Medical Ethics Professor of Medicine Professor of Public Health Professor of Medicine in Psychiatry Weill Cornell Medical College

Director of Medical Ethics and Chair, Ethics Committee

Attending Physician NewYork-Presbyterian Hospital The Division of Medical Ethics pursues a tripartite mission of medical education, ethics consultation, scholarship and research. The division teaches medical students, house staff, and attending staff and provides ethics education throughout the pre-clinical years including professionalism, the history of medical ethics, methods of ethics consultation, and ethical issues across the life span. The division also considers ethical and regulatory issues in clinical research, so that students appreciate their responsibilities as clinicians and investigators.

Collaboration was a major theme in the life of the Division of Medical Ethics in 2018. The division's collaborations with many colleagues and programs served to enrich the experiences of patients and the education of trainees. With NewYork-Presbyterian Hospital partners in Patient Services Administration, the Ethics Consultation Service was active on both the NYPH-WCMC campus and the Lower Manhattan Hospital offering wise counsel to patients, families, and staff regarding the ethical challenges confronted in patient care.

The division's case consult volume makes it one of the most active ethics consultation services in the U.S. The Ethics Committee of NewYork-Presbyterian/Weill Cornell Medicine is chaired by Dr. Joseph J. Fins, Division Chief, who provides oversight to the consultative process and guidance to the hospital on policies and procedures related to medical ethics and patient rights. In 2018, the division welcomed Dr. Barrie Huberman, a clinical psychologist, to serve as Director of Clinical Ethics, and Dr. Ezra Gabbay, Associate Clinical Ethicist and Hospitalist, was named Chair of the new ethics sub-committee launched at Lower Manhattan Hospital with the expertise of Drs. Judy Tung and Art Evans from the Division of General Internal Medicine.

A key collaboration in the division is with the New York-Houston Ethics Consortium, which sponsors a medical ethics fellowship supported by the WDOM, the Dean's Office and the NewYork-Presbyterian Hospital, as well as The Houston Methodist Hospital and Baylor Medical College in Houston. A unique offering in American bioethics, this collaboration spans two great medical centers and distinct regions of our country, providing a singular experience for trainees. The fellowship is run by Dr. Samantha F. Knowlton, Assistant Professor of Medical Ethics in Medicine, whose work has focused on ways to mediate futility disputes and reenvision ethics consultation. This year divisional faculty and fellows - Dr. Nicole Meredyth (a surgical resident) and Dr. Nekee Pandya (a hospitalist faculty member) - visited Houston for the annual academic retreat.

The division has also collaborated with colleagues in the WDOM from Hospital Medicine, notably Drs. Matthew McCarthy and Ezra Gabbay, on the ethics of hospitalist medicine (with grant support from the Division of General Internal Medicine). This collaboration has resulted in a number of publications by Drs. McCarthy, Gabbay and Fins, as well as Dr. Diego Real de Asua, a fellow who graduated in July and is now doing hospitalist medicine and clinical ethics in Madrid. In 2018, the division published the first study examining the epidemiology of ethical issues seen on an academic hospitalist service.

Dr. Inmaculada de Melo-Martin, Professor of Medical Ethics, has continued her fruitful collaboration with the Center for Reproductive Medicine at Weill Cornell Medicine (led by Dr. Zev Rosenwaks). Dr. de Melo-Martin continues to pursue questions regarding genetic identity and assisted reproduction themes addressed in her highly regarded volume, *Rethinking Reprogenetics: Enhancing Ethical Analyses of Reprogenetic Technologies* (Oxford University Press). She has also continued to work with Dr. Ron MacKenzie, the *C. Ronald MacKenzie Chair in Ethics and Medicine,* at the Hospital for Special Surgery.

The division also played a key role in advancing the educational mission of Weill Cornell Medical College. Dr. de Melo-Martin led the ethics curriculum on professionalism. Dr. Knowlton assumed the leadership of the ethics component for the course, *Health, Illness and Disease*. Dr. Huberman led Advanced Clinical Ethics. Additionally, ethics content has recently been added to the transition for the residency course given to medical students.

The division has also continued a synergistic collaboration with colleagues and students in Doha, via Dr. Pablo Rodriguez del Pozo, Associate

Medical Ethics

Professor of Medical Ethics in Medicine, who leads the ethics curriculum at that campus. Dr. Rodriguez del Pozo explores cross-cultural issues and medical education. He has completed a project funded by the Qatar National Research Foundation exploring the rights of persons with disabilities, which is aimed to inform the Qatari legal system. This multinational project involves the Weill Cornell Medical College in



Dr. Fins (center) with division faculty.

Qatar, Qatar University, the Institute of Human Rights at Carlos III University in Madrid, and the Division of Medical Ethics, WCM, with Dr. Fins collaborating. The project will culminate with an important monograph that will have practical and theoretical impact on disability studies.

Dr. Fins continues his collaboration with Dr. Nicholas D. Schiff, *Jerold B. Katz Professor of Neurology and Neuroscience*, as they co-direct the Consortium for the Advanced Study of Brain Injury (C.A.S.B.I.) at Weill

Clinical Ethics Fellowship Program

Joseph J. Fins, M.D., FACP Program Director

This fellowship in clinical and research ethics is part of the New York-Houston Medical Ethics Consortium, which brings together Houston Methodist Hospital, Baylor College of Medicine, Weill Cornell Medicine and the NewYork-Presbyterian Healthcare System. Cornell Medicine and Rockefeller University. Dr. Schiff is Principal Investigator on an NIH Brain Initiative grant on the use of Deep Brain Stimulation in severe brain injury. Dr. Fins is a Co-investigator on the project and has received an NIH ethics supplement to study the experiences of subjects and families participating in this clinical trial. CASBI's goal is to elucidate mechanisms of recovery and develop public policy to meet the needs of these patients and families. Dr. Fins has expanded the reach of CASBI through his appointment at Yale Law School as the Solomon Center Distinguished Scholar in Medicine, Bioethics and the Law. Following upon his book, Rights Come to Mind: Brain Injury, Ethics and the Struggle for Consciousness (Cambridge University Press), Dr. Fins has pioneered ethical and legal scholarship advancing the civil and disability rights of patients with severe brain injury. His collaborative scholarship with Yale Law School students and faculty has resulted in numerous law review and policy papers (e.g., The Yale Journal of Health Policy, Law, and Ethics, Florida State University Law Review, and Stanford Technology Law Review). Working with Dr. Fins, Zachary Shapiro, M.A., J.D. joined the division as a post-doctoral associate to assist with the Weill Cornell-Yale Law School CASBI scholarship. The work of CASBI has been supported by the Greenwall Foundation, Dana Foundation, John and Eva Usdan, Jerold B. Katz Foundation, as well as the NIH.

Dr. de Melo-Martin was installed as a Fellow of the Hastings Center. Dr. Fins was honored with election as a Fellow of the Royal College of Physicians (FRCP), London, and he gave named lectures at St. Louis University, the University of Texas Medical Branch, Galveston, James Madison University, the University of Massachusetts Medical School, and the University of Toronto. He was also named to the International Academic Council of the Instituto de Humanidades y Ciencias de la Salud of the Gregorio Marañón de la Fundación Ortega-Marañón in Madrid; appointed to the editorial board of the new Hastings Center journal, Ethics and Human Research; and initiated an editorial role as Special Features Editor for Ethics in The Journal of Head Trauma and Rehabilitation. He also received The Nicholas E. Davies Memorial Scholar Award for Scholarly Activities in the Humanities and History of Medicine from the American College of Physicians.

Nephrology and Hypertension



Manikkam Suthanthiran, M.D. Chief, Division of Nephrology and Hypertension

Chief, Department of Transplantation Medicine and Extracorporeal Therapy

Stanton Griffis Distinguished Professor of Medicine Professor of Medicine

Professor of Biochemistry Professor of Medicine in Surgery Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital The Division of Nephrology and Hypertension is committed to a tripartite mission of patient care, research, and education. A combination of resources has ensured the division's success, including continuous NIH funding over three decades, a clinical immunogenetics laboratory, a self-supported hypertension clinical practice, and support from Weill Cornell Medicine, NewYork-Presbyterian Hospital and philanthropy. The division's clinical excellence is the product of making patients the highest priority, while effectively translating bench discoveries to the bedside and applying evidence from clinical trials into compassionate clinical practice.

We provide compassionate, comprehensive, state-of-the-art care to each patient afflicted with kidney disease and/or high blood pressure. We have self-organizing teams for each critical area of nephrology: transplantation medicine, dialysis, apheresis, hypertension, clinical nephrology (e.g., diabetes and metabolic renal disease), cancer nephrology, critical care nephrology, acute kidney injury and cardio-renal syndromes, nephropathology and obstetrics nephrology. Services include renal consultation services, inpatient renal medicine service, dialysis therapy, and kidney and pancreas transplantation.

Our nephrologists work collaboratively with nephrologists with primary appointments at The Rogosin Institute, and the kidney transplant surgeons in the Department of Surgery, to manage our transplant recipients with highly personalized therapies to protect the transplanted organ while helping to reduce the toxic side effects of anti-rejection drugs. Our transplant physician-scientists have made pioneering discoveries on mechanisms of action of anti-rejection drugs, as well as noninvasive molecular tests to personalize immunosuppressive drug therapy of transplant patients.

The kidney disease program has been consistently rated in the top 10 by US News & World Report (Ranked 6th in the country and 1st in New York in 2018). It is one of the highest ranked programs among the medical



Dr. Suthanthiran (third from left at table) with division faculty.

Nephrology and Hypertension

subspecialties at NewYork-Presbyterian Hospital. The kidney transplantation program at Weill Cornell Medicine is a significant contributor to NYP's transplantation program (ranked #1 in the U.S. for the last 10 years), and its translational research has been transforming care for transplant recipients. More than 200 kidney transplants are performed annually at our center with excellent patient and



graft survival rates. The most recent adult (18+) one-year patient and graft survival rates, following living donor kidney transplantation, were 99.04% and 98.07%, respectively. The one-year patient and graft survival rates following deceased donor kidney transplantation were 96.07% and 93.47%, respectively. These exemplary outcomes are all the more impressive in light of the center transplanting highrisk patients. (Data Source: Scientific Registry of Transplant *Recipients, Health Resources* and Service Administration, January 7, 2019.)

The first kidney transplant in the New York tri-state region was performed at our center

in October 1963; more than 5,000 kidney transplants have been performed since the center's inception. Several innovations in transplantation have been introduced by our transplant physicians, including: blood type (ABO) incompatible kidney transplants; kidney transplantation across a positive cross-match; minimizing the amount of drugs patients need for successful transplantation; treatment protocols to reduce serious post-transplant complications (e.g., infection and malignancy); and noninvasive molecular assays for assessing transplant status and reducing the need for an invasive biopsy procedure.

The division's Hypertension Center is one-of-a-kind in the U.S. and has discovered and implemented clinical therapies that are personalized for the individual patient. The hypertension faculty pursue innovative research (e.g., studies of pregnancy-induced hypertension, mind-body link in hypertension, personalized drug therapy for hypertension control). Internationally acclaimed, the Hypertension Consultative practice continues to thrive under the direction of Dr. Phyllis August, Ralph A. Baer Professor of Medical Research, and with complementary expertise provided by Dr. Mark S. Pecker, Professor of Clinical Medicine, Dr. Samuel J. Mann, Professor of Clinical Medicine, Dr. Line Malha, Assistant Professor of Medicine, and Rosemerie Marion, ANP, Nurse Practitioner.

The division continues to drive breakthrough research. Division Chief, Dr. Manikkam Suthanthiran, directs a highly productive, NIHfunded world-renowned research Laboratory of Immunogenetics and Transplantation. The division has pioneered the development of gene expression profiling for the noninvasive diagnosis and prognostication of acute rejection in renal allografts, and has contributed to several landmark studies in organ transplantation on elucidation of the genetic signature of rejection and tolerance. Dr. Suthanthiran's translational research has been NIH-funded continuously for 30-plus years, and he is a recipient of the prestigious NIH MERRIT award.

Dr. Phyllis August serves as the Site PI on a cooperative grant from the NHLBI/NIH/ DHHS to evaluate the benefits and harms of pharmacologic treatment of mild CHTN in pregnancy. Dr. Mary Choi has an NIH-funded grant to study novel mechanisms of organ fibrosis. Dr. Darshana Dadhania has an NIDDK cooperative grant to study the impact of the APOL1 gene on long-term outcomes in renal transplant recipients of a kidney from an African American donor and the impact on kidney function in African Americans donating a kidney. Dr. John Lee has an NIAID grant to invent and apply shotgun sequencing of urinary cell-free DNA to define the microbial, bacterial growth dynamics, tissue injury in the transplanted kidney, and the host's response to urinary tract infection (UTI). In another NIAID-funded grant, he is investigating many lines related to the gut microbiome.

Dr. Mary Choi, Professor of Medicine and a world-renowned physician-scientist, is conducting research addressing the mechanisms of kidney injury and failure. Dr. Choi's fundamental studies should not only yield key insights into mechanisms underpinning kidney injury, but will also help to identify novel therapeutic targets for the prevention of progression of kidney injury manifested by fibrosis. The multifunctional cytokine transforming growth factor beta (TGF-b) is considered a major player in kidney disease and health, and Dr. Choi's seminal studies have led to the cloning and characterization of the cell surface receptors for TGF-b1; delineation of key intracellular mediators of TGF-β signals; and resolution of glomerular endothelial cell proliferation and differentiation. Her original contributions have resulted in a greater understanding of the molecular mechanism of tissue injury, inflammation, and fibrosis as they pertain to the pathogenesis of chronic kidney disease. Her laboratory has successfully resolved mechanisms by which TGF-B1 elicits key cytoprotectants, such as heme oxygenase-1, and carbon monoxide and protection from oxidative stress and kidney injury via activation of autophagy. Dr. Choi and colleagues recently identified a new therapeutic target by their discovery that a receptor-interacting protein kinase-3 independently promotes kidney fibrosis. Dr. Choi's research has been supported continuously by highly competitive NIH awards, and she is a PI, Co-PI, and Co-Investigator on multiple NIH grants.

2018 research highlights included Dr. John Lee, Assistant Professor of Medicine, serving as a co-lead author on a seminal study published in *Nature Communications* that demonstrated a new method for monitoring urinary tract infections that surpasses traditional methods. The cell-free DNA sequencing technique is capable of diagnosing rare infections; it is expected that it will aid in early diagnosis and treatment of urinary tract infection in kidney transplant recipients, as well as in others afflicted with UTI. In recognition of his presentation at the Annual Meeting of the American Society of Nephrology Kidney Week 2018, Dr. Lee was featured on the front cover of the American Society of Nephrology Kidney Newsletter. Dr. Thangamani Muthukumar (senior author), Division of Nephrology and Hypertension, and Dr. Gaurav Thareja (first author), Department of Physiology and Biophysics, WCM-Qatar, collaborated on a paper entitled "Single Nucleotide Variant Counts Computed from RNA Sequencing and Cellular Traffic into Human Kidney Allografts" that was selected as the top 2018 translational paper published by the American Journal of Transplantation.

Nephrology faculty teach the *Health, Illness, and Disease Course* for Weill Cornell medical students at both the New York and Qatar campuses. A daily educational conference ensures faculty and fellows practice evidencebased medicine, as well as receive CME credits. There has been a 100% pass rate for the ABIM Nephrology subspecialty, and the scholarship of our trainees and faculty is demonstrated by their presentations of original research at every national and international meeting related to nephrology and transplantation. Our full-time faculty lecture nationally and internationally and have published 78 peer-reviewed articles since July 2015.

Nephrology Fellowship Program

Phyllis August, M.D., M.P.H. Program Director

Our highly competitive two-year nephrology fellowship program is designed to provide comprehensive training in all aspects of kidney disease including acute and chronic kidney failure; end stage kidney disease; hemodialysis including home hemodialysis; peritoneal dialysis; apheresis; kidney and kidney and pancreas transplantation; hypertension; glomerulopathy; onconephrology, obstetric nephrology, kidney stones, polycystic kidney disease, and metabolic disorders including acid base and fluid and electrolyte disorders. A third and fourth year are available for additional research training. Despite almost 50% of nephrology fellowship slots not being filled across U.S. nephrology fellowship programs, our program has been highly successful in fulfilling 100% of the fellowship slots through the Nephrology Fellowship Matching Program.

ublic Health Programs



Ann B. Beeder, M.D. Chief, Division of Public Health Programs

Jeanette and Jeffrey Lasdon Associate Professor of Clinical Public Health and Psychiatry

Associate Professor of Clinical Medicine Associate Professor of Clinical Psychiatry at the Weill Medical College

Associate Attending Physician NewYork-Presbyterian Hospital The Division of Public Health Programs delivers integrated multidisciplinary patient care for patients with trauma and addiction through a variety of outpatient programs. The programs provide medical, psychiatric, and substance abuse treatment to patients with substance use problems, including alcohol, marijuana, nicotine, cocaine, heroin, and prescription medication. Onsite medical, psychiatric, trauma treatment, and social services promote and accelerate patients' progress toward recovery. Consultation services are available for expert evaluation, diagnosis, treatment, and referral for patients with substance use disorders being treated at the NewYork-Presbyterian Hospital. Outpatient treatment locations include The Midtown Center for Treatment and Research, The Headstrong Project, and the Vincent P. Dole Institute for Treatment and Research.

The Midtown Center for Treatment and Research is located at 56 West 45 Street, Floor 9, NYC, NY 10031. It is an outpatient drug treatment program providing multidisciplinary alcohol and drug treatment with integrated psychiatric and social services. Services include outpatient suboxone detoxification and maintenance for opiate dependency (prescription pain medication and heroin), trauma treatment (EMDR and CBT), psychiatric care, DUI program, anger management, and other services. Patients are carefully evaluated involving an individualized treatment plan, including groups, individual treatment, urine

Patients are **carefully evaluated involving an individualized treatment plan,** including groups, individual treatment, urine and other toxicology, and psychiatric evaluation and care when needed.

and other toxicology, as well as psychiatric evaluation and care when needed. Patients needing primary and specialty medical care have access to CIMA at Weill Cornell Medicine and comprehensive subspecialty care (e.g., HCV, HIV, cardiology, pulmonary, nutritional, and other services).

With support from the NYC DOHMH (Department of Health and Mental Hygiene), The Experience Center continues to provide specialized drug and alcohol treatment to adolescents. The center is nestled in the adult section of The Midtown Treatment Center and uses existing staff, and new staff members, including adolescent substance abuse specialists, creative arts therapists, as well as a counselor/outreach coordinator.

The Headstrong Project is located at 641 Lexington Avenue, Floor 25, NYC, NY 10022. It is a PTSD (Post- Traumatic Stress Disorder) and trauma treatment program for combat veterans. It has attracted national recognition for its highly effective evidence-based treatment, which is free and confidential for returning Iraq and Afghanistan combat veterans living in the NYC and Tri-State Area. The treatment is individually tailored and designed for each veteran in support of The Headstrong Project's motto: "Healing the Hidden Wounds of War." In partnership with Weill Cornell, the Headstrong Project is an awardwinning program that continues to grow with new locations in multiple cities across the country. At this time there are locations in California, Colorado, Illinois, Maryland, New Jersey, New York, Pennsylvania, Texas, Virginia, Georgia, and Washington D.C. The 2018 Headstrong Gala of NYC was held at New York City's Pier 60 (Hudson River) with Seth Meyers as master of ceremonies. The evening celebrated veterans and their stories of success based upon the services they received from the Headstrong Project.

The Vincent P. Dole Institute for Treatment and Research is located at 503 East 70th Street, NYC, NY 10021. It is part of the NewYork-Presbyterian Hospital's



Dr. Beeder (far right back row) with the public health programs team.

Ambulatory Care Network. Both the Midtown Center and the Vincent P. Dole Institute serve as sites for the study of the prevention and treatment of dependency diseases, as well as outreach, evaluation, and treatment of patients with hepatitis C. Research studies are underway on the integrated care model, epidemiology and treatment of hepatitis C infection in drug users, and understanding immunity in opioid users.

The Employee Assistance Program Consortium (EAPC), serves the approximately 36,000 employees of Weill Cornell Medical College, Rockefeller University, NewYork-Presbyterian Hospital/Weill Cornell Medicine, Hospital for Special Surgery, and Memorial Sloan-Kettering Cancer Center. The program provides free and confidential evaluation, crisis intervention, and referrals for a wide range of problems affecting employees. The EAP also offers free group sessions on topics such as stress reduction, caring for elderly parents, and a variety of mental health topics.

In addition to providing a host of valuable services for a wide variety of patients, the division's faculty is distinguished for education and research on topics related to substance use; these topics include the integrated care model, epidemiology and treatment of hepatitis C infection in drug users, understanding immunity in opioid users, and more. A study is underway with Division Chief, Dr. Beeder, serving as a co-Principal Investigator, and Dr. Ronald Crystal, Chairman, Genetic Medicine at Weill Cornell Medicine, on a Phase I clinical trial that is exploring a vaccine model in patients with cocaine dependency disorder. Dr. Mirella Salvatore, an Assistant Professor of Medicine in the division, is also working on the project and has been publishing related research papers in the peer-reviewed journals.

Pulmonary and Critical Care Medicine



Fernando J. Martinez, M.D. Chief, Division of Pulmonary and Critical Care Medicine

Bruce Webster Professor of Internal Medicine

Professor of Clinical Medicine Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital The Division of Pulmonary and Critical Care Medicine employs advanced expertise in the diagnosis and treatment of all types of respiratory disorders, including those related to sleep. Physicians of Weill Cornell Pulmonary Associates provide diagnostic and therapeutic services in a state-of-the-art medical facility. The division provides 24-hour, in-hospital coverage of the Medical Intensive Care Unit (MICU) at Weill Cornell Medicine and at NYP/Lower Manhattan Hospital. The Bronchoscopy Suite offers state-of-theart patient care, including Endobronchial Ultrasound (EBUS), Navigational Bronchoscopy, and chest tube and pleurx catheter placement. MICU clinical care offers daytime and expanded overnight services.

The Pulmonary Inpatient Consult Service provides rapid, expert clinical care seven days a week, including the provision of an Outreach Service for patients who are critically ill outside of the ICU. It upgrades continuity of care for patients who are transitioning from inpatient to outpatient management and has led to successful interdisciplinary collaborations with specialists throughout the institution. The division, jointly with the Columbia campus, has been designated by the Pulmonary Fibrosis Foundation (PFF) as a Center of Excellence and is active in an ALA-ACRC series of joint projects.

The Pulmonary Procedure Service, directed by Dr. Ben-Gary Harvey, provides innovative diagnostic and therapeutic services for the diagnosis and management of lung cancer, pulmonary fibrosis, and lung infection. Dr. Harvey, who has received advanced training in the bronchoscopic management of advanced emphysema, has launched a new program, Endoscopic Valve Lung Volume Reduction. The procedure utilizes the insertion of small valves through a bronchoscope; once the valves reach the most diseased areas of the lung, Dr. Harvey occludes (or closes) the nonfunctional portions of the lung. This creates room for the healthier parts of the lung to improve breathing function and quality of life.

Led by Dr. Lindsey Lief, Director of the Medical Intensive Care Unit, the division has established a new clinic for post-ICU recovery (CPR) (housed within Weill Cornell Medicine Pulmonary Associates located at 425 East 61 Street). Experts in intensive care will see patients in follow-up after an ICU admission either from NYP/Weill Cornell or other institutions. ICU survivors are at risk for postintensive care syndrome (PICS) which can have effects on mental and physical health, cognitive function and the ability to care for oneself and go back to work. This practice provides ICU survivors with everything they need to allow the fullest recovery.

For NYPH/WCM's Lower Manhattan Campus, Dr. David Weir, Assistant Professor of Medicine, was appointed as Director of Pulmonary and Critical Care Medicine. Dr. Weir's expertise includes treatment and symptom management for advanced lung disease and compassionate care for the critically ill. Dr. Seth Manoach, Assistant Professor of Medicine, was appointed as Director of the MICU. An expert in the pathophysiology of critical illness, including cardiopulmonary interface and advanced airway management, Dr. Manoach is known for his unwavering dedication to improving patient care in the MICU and to alleviating human suffering.

The Pulmonary Function Laboratory, led by Dr. Abraham Sanders, remains a vital component of the division's continuum of care via expert and timely diagnostic services. Led by Medical Director, Dr. Ana Krieger, and other experts, the Weill Cornell Center for Sleep Medicine (run jointly by the Weill Department of Medicine's Division of Pulmonary and Critical Care Medicine and the Department of Neurology) provides evaluation and treatment for the full range of pulmonary and non-pulmonary sleep problems, employing multidisciplinary specialists and carrying out cutting-edge federally-funded research projects.

Dr. Joseph Mailman joined the division in 2018 and will provide clinical care in the MICUs. He is a graduate of SUNY Upstate Medical Unviersity and completed a Pulmonary and Critical Care fellowship at the University of Rochester Strong Memorial Hospital.

The division's research portfolio ranges from interstitial and obstructive lung diseases, pneumonia, and lung cancer, to sleep medicine and genetic medicine. Its physician-scientists are participating in clinical and basic mechanistic investigations, both independently and with collaborators.

As a key participant in numerous NHLBI-sponsored COPD studies, Dr. Martinez, Division Chief, defined the approaches to diagnosing idiopathic interstitial pneumonias, imaging and biochemical approaches to prognostication, and he has investigated the role of various therapeutic approaches for Idiopathic Pulmonary Fibrosis (IPF). He has also studied the interaction between dysbiosis in



Dr. Lindsay Lief (L) received a Physician of the Year Award in November 2018 from the Department of Nursing, NewYork-Presbyterian Hospital/ Weill Cornell Medical Center. (R) Nenita Lechido, RN, MICU

role of lung volume reduction surgery, chronic macrolide therapy, statin therapy, and long-term oxygen therapy in COPD. He has also been involved in defining the immunological basis of acute exacerbations, the role of innovative small airways imaging methods, and the role of COPD endotypes. He serves as the Principal Investigator on a nearly \$11 million dollar R01 grant (The Capture Study) from the National Heart, Lung, and Blood Institute. The Capture Study, guided by strong preliminary data, seeks to identify COPD patients who are under-recognized and undertreated in 100 primary care centers across five PBRNs in the U.S. Similarly, with NHLBI support, Dr. Martinez has defined optimal

the lung microbial community and disease progression, which led to an ongoing NHLBIfunded study of an innovative therapeutic approach targeting IPF progression.

Dr. Augustine M.K. Choi, Dean of the Weill Cornell Medicine College, continues to lead an extremely active laboratory that, in part, leads the global investigative carbon monoxide (CO) community in understanding this complex biological pathway. His laboratory has successfully translated these findings as they lead the design and successful completion of Phase I and Phase II trials targeting the use of inhaled CO in human disease. Dr. Renat Shaykhiev is focused on airway epithelial stem cells, epithelial-mesenchymal

Pulmonary and Critical Care Medicine

interactions, epithelial-immune interactions and innate immunity in the lung, and pathogenesis of airway remodeling in human lung disease. Dr. Heather Stout-Delgado is focused on the implications of an aging immune system and its impact on infections and respiratory inflammatory disorders. Dr. Soo Jung Cho has made key observations characterizing the role of impaired glucose metabolism and progressive lung fibroproliferation. Dr. Suzanne Cloonan leads a research program that is centered on the role of iron metabolism in normal and diseased lung. Dr. Kiichi Nakahira has established an innovative translational investigative program examining the role of mitochondrial dysfunction in sepsis.

Dr. Robert Kaner remains actively involved in basic and clinical research programs in Interstitial Lung Disease (ILD). He is the principal investigator of numerous industry and federally-funded therapeutic trials exploring innovative therapeutic approaches to patients with ILD. Dr. Ben-Gary Harvey continues his study on a new therapy for COPD. Dr. Michael Niederman has begun clinical investigation protocols related to pneumonia in the ICU and

Pulmonary and Critical Care Fellowship

Meredith Turetz, M.D., Program Director

Robert Kaner, M.D., Associate Program Director

Brad Hayward, M.D., Associate Program Director

A 3-year comprehensive program with 12 fellows. Curriculum includes rotations on the consultative pulmonary service, doing advanced pulmonary procedures, and participating in rotations in the medical, neurologic, and surgical intensive care units, and to care for inpatients and outpatients under supervision of the division's clinical faculty. All fellows conduct at least 18 months of research, spanning a broad range of expertise (e.g., bench laboratory research, health service and/or patient centered investigation). Key investigative areas include cellular biology and molecular immunology, lung and vascular injury, human pathophysiology, and epidemiology and bioinformatics. Faculty mentoring across the tri-institutional setting provides an ideal training environment.

in the community. There is a growing interest in palliative care among critically ill patients, and Dr. Lindsay Lief has partnered with Dr. Holly Prigerson on the study of patient and provider attitudes at the end-of-life in the ICU. Dr. Bradley Hayward is developing a collaboration with Geriatrics and other divisions in the clinical aspects of palliative care. Translational clinical research in the ICU is being led by Dr. Edward Schenck, who is expanding a clinical database that links detailed clinical data with biological patient samples to study inflammation and lung injury in critically ill patients with sepsis.

The division's educational mission involves a multifaceted program for the training of students and residents, as well as a Pulmonary and Critical Care Fellowship. Simulation programs for providing ACLS (Advanced Cardiovascular Life Support) and the insertion of Central Venous Catheters continue. The division hosts the William Briscoe Lung Club, where fellows from the training programs throughout the area present their scientific work, and there is a monthly multidisciplinary conference on diagnosis and management of ILD.

The division has an NHLBI T32 training grant under the leadership of Drs. Martinez, Kaner, and Augustine M.K. Choi. Entitled "Multidisciplinary Approach to Training in Respiratory Research," the program includes multiple faculty across the tri-institutional consortium who are training respiratory focused physician-scientists. The division's many trainees have received career development awards as well as private foundation funding. The main objective of the training program is to provide an intensive research experience that fosters the skills needed to pursue a successful career in investigative pulmonary sciences. Dr. Alex Racanelli, the first appointed trainee to the program, has been joined by Drs. Lisa Torres and John Harrington.

The division congratulates Dr. Kirana Gudi, Program Director of the WDOM's residency training program in internal medicine, on her recent appointment as the department's Vice Chair of Education; she will oversee a broad range of training programs and work to further faculty development.

Regenerative Medicine



Shahin Rafii, M.D. Chief, Division of Regenerative

Arthur B. Belfer Professor in Genetic Medicine

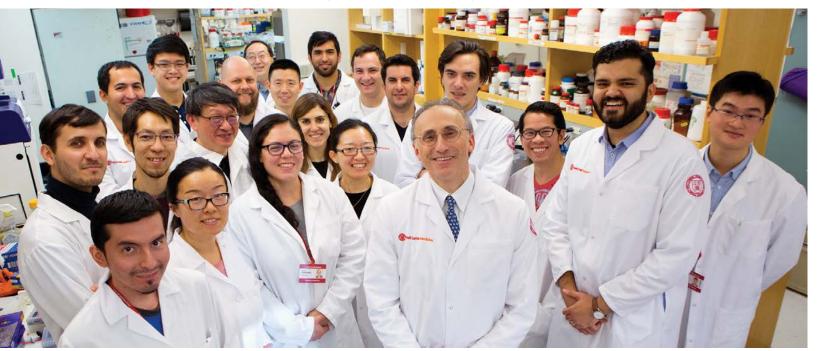
Director, Ansary Stem Cell Institute

Professor of Medicine Professor of Genetics Professor of Reproductive Medicine

The Division of Regenerative Medicine is dedicated to furthering discoveries and knowledge on the biological events of vasculature in organ regeneration and repair, and also to translating their potential into lifesaving therapeutics. Led by Dr. Shahin Rafii, who has been at the forefront of stem cell research for nearly two decades, the division has established an interactive community of researchers and clinicians who work at Weill Cornell Medicine in stem cell research and regenerative medicine. Research in this division is not only of great value in terms of patient care, it is serving to educate the next generation of scientists and clinicians, as well as the general public, about the realities and potential benefit of stem cell research. A role model in creating synergistic partnerships with other institutions and foundations, the division also advocates for public policy that promotes stem cell based research and therapies.

Known for its state-of-the-art approach to investigation, the division's laboratory has been carrying out cutting-edge studies on stem cells and organ regeneration since 2003. Dr. Rafii, who also serves as the Director of the Ansary Stem Cell Institute at Weill Cornell Medicine, provides a core laboratory that is utilized by junior faculty members, principle investigators, postdoctoral fellows, graduate resident students, and support staff. The laboratory also trains visiting scientists from around the world. Additionally, the division deploys staff to the Starr Foundation Tri-Institutional Stem Cell Derivation Laboratory at WCM to offer on-site human embryonic stem cells and a GLP facility that serves researchers working with pluripotent stem cells.

The Ansary Stem Cell Institute is home to landmark advances in regenerative medicine. Dr. Rafii, its Director, is nationally and internationally recognized for having pioneered the transformative paradigm demonstrating that tissue-specific adult endothelial cells (ECs) are unique instructive vascular niche cells that produce paracrine "angiocrine factors" to directly induce organ regeneration. This concept has revealed the remarkable heterogeneity of the adult vasculature that is underscored by production of tissue-specific angiocrine factors necessary for orchestrating organ regeneration. Dr. Rafii's laboratory has ushered in a new era in state-of-the-art models for the study of tissue-specific induction of angiocrine factors in ECs. His



Dr. Rafii (front row center) in the laboratory.

Regenerative Medicine

laboratory's many advances include the identification of physiologically relevant tissue-specific stimulatory and anti-fibrotic angiocrine factors. The team utilizes *in vivo* genetic models to determine the role of angiocrine factors in organ regeneration and has played a major role in illuminating the intrinsic and microenvironmental determinants of vascular heterogeneity.

The division also focuses on stem cell biology and their niches using mouse and human genetic models, tissue culture approaches and molecular biology to model the complex interactions between stem cells and their micro-environment. Multi-omics, molecular and cell biological techniques are combined to achieve a systems-level understanding of these complex processes.

Currently, Dr. Rafii is focused on identifying the molecular and cellular pathways involved in organ regeneration and tumor growth. He has established the concept that vascular endothelial cells are not just inert plumbing to deliver oxygen and nutrients, but also by production of tissue-specific growth factors, defined as angiocrine factors, support organ regeneration and tumor proliferation. He has shown that bone marrow endothelial cells by elaboration of angiocrine factors, such as Notch ligands, support stem cell self-renewal and differentiation into lymphoid and myeloid progenitors. He has recently shown that liver and lung endothelial cells are endowed with unique phenotypic and functional attributes, and by production of unique instructive growth factors, contribute to the hepatic and alveolar regeneration. Dr. Rafii has also induced differentiation of the murine and human pluripotent embryonic stem cells into functional and engraftable vascular and hematopoietic derivatives. He developed screening approaches to exploit endothelial cells, as a vascular niche platform, to identify, as yet, unrecognized novel angiocrine factors that instruct organ

morphogenesis and also orchestrate stem cell self-renewal and differentiation.

Dr. Qiao Zhou and Dr. Raphael Lis are also bringing cutting-edge research to the Division of Regenerative Medicine. Dr. Zhou is focused on how specific cell types are created during development and he is using this knowledge to regenerate vital cells by reprogramming in adult organs. One of his goals is to regenerate beta cells in adults as a way to treat Type I diabetes, a disease marked by a lack of beta cells due to autoimmune attacks. Also in process is the study of intestinal stem cells in large intestine mucosal regeneration. The Zhou lab has identified critical factors, without which, colon mucosa is transformed into small intestine mucosa with implications in diseases such as short-bowel disease, inflammatory bowel diseases, and colorectal cancer. Dr. Zhou uses state-of-the art approaches, including genomic engineering, drug screening, human embryonic stem cells, and human organoids are employed for mechanistic understanding and therapeutic development.

Dr. Raphael Lis is focused on how the development and maintenance of the haematopoietic system relies on a scant number of self-renewing haematopoietic stem cells (HSCs) residing in the adult bone marrow and representing the top of a complex cellular hierarchy. Transplantation of HSCs, harvested from either bone marrow, mobilized peripheral blood or umbilical cord blood (UCB), has become the standard of care for numerous hereditary and malignant blood diseases. However, the limited availability of optimally human leukocyte antigen (HLA)-matched donor HSCs remains a challenge, especially for individuals of non-Caucasian background or mixed ethnicity. This research has converted endothelial cells to engraftable HSC-like cells. Dr. Lis is advancing his research towards engineered autologous bone marrow transplant and hematological disease modeling.

Rheumatology



Mary K. Crow, M.D. Chief, Division of Rheumatology

Joseph P. Routh Professor of Rheumatic Diseases in Medicine

Professor of Medicine Weill Cornell Medical College

Benjamin M. Rosen Chair in Immunology and Inflammation Research

Attending Physician NewYork-Presbyterian Hospital

Based at Hospital for Special Surgery (HSS), the Division of Rheumatology is a national and international leader in clinical care of patients with autoimmune, inflammatory and musculoskeletal conditions; research that has contributed to identification of novel therapeutic targets and new understanding of disease mechanisms; and innovative approaches to medical education and education research. In addition to 40,000 outpatient rheumatology visits per year, the division has responsibility for all of the pre- and post-surgical medical care of more than 30,000 patients per year who undergo orthopaedic surgery procedures at HSS. The large volume of patients treated at HSS has enabled HSS clinicians and researchers to develop patient registries with detailed clinical information that provides an important resource for clinical and translational research studies. Longitudinal data collection, patient reported outcomes and availability of biologic samples are features of some of the registries that provide valuable research resources shared with collaborators nationally and internationally.

Achieving optimal outcomes for patients is the goal of our 25 active consultative rheumatology practitioners, treating disorders ranging from osteoarthritis and rheumatoid arthritis (RA) to the most complex patients with lupus, vasculitis, systemic sclerosis or diagnostic dilemmas. Our Hospital-Based Physicians Group, co-chaired by Drs. Theodore Fields and Jessica Gordon, is implementing the transformation of the division's clinical practice operations with the goal of establishing efficient and valuefocused care across all practices. Dr. Steven Magid serves as Chief Medical Information Officer for HSS, overseeing implementation of our medical information technology system in the hospital and office practices. Optimal preparation and postoperative management of patients undergoing orthopedic surgery at HSS is under the leadership of Dr. Linda Russell, Director of Perioperative Medicine. Dr. Karen Onel leads our Pediatric Rheumatology Service, with many clinical and academic programs shared with the adult Rheumatology Division.

Rheumatology clinics at HSS represent an essential training component of our rheumatology fellowship programs. The adult rheumatology training program is directed by Drs. Anne Bass and Jessica Berman, and the pediatric rheumatology training program is directed by Dr. Alexa Adams. Fifteen adult and pediatric rheumatology fellows provide continuity of care for the patients seen in the clinics, with involvement of all rheumatology faculty members as supervisors and teachers. A weekly clinic for evaluation of new patients, and specialty clinics focused on inflammatory arthritis, lupus and antiphospholipid syndrome, vasculitis and systemic sclerosis, provide rheumatology fellows and rotating internal medicine residents with a rich



experience in evaluation and management of a full spectrum of rheumatic diseases. A rich learning environment is also provided in the multidisciplinary clinic conferences, following Monday Inflammatory Arthritis Clinic and Friday Lupus Clinic, which involve discussion of patient management guided by recent literature, and enriched by attendance of representatives from other Weill Cornell specialties. Each rheumatology trainee completes a basic or clinical research project under the supervision of one or more faculty

Rheumatology

members and with oversight by a mentoring committee. Trainees pursuing a research career are encouraged to apply for peer-reviewed research grant support, and those headed for careers in academic medicine often continue their research in a fourth fellowship year. This strong academic environment attracts the future leaders in academic rheumatology to its fellowship program.

The division has a long history of leading basic and translational research studies that have elucidated important mechanisms of autoimmune and inflammatory disease and have identified important therapeutic targets. It is also recognized for its productive collaborations among bench scientists and clinicians. Dr. Lionel B. Ivashkiv, Chief Scientific Officer, is supported by several NIH research grants addressing epigenetic mechanisms relevant to regulation of inflammation and bone resorption in rheumatoid arthritis. His lab is making seminal observations on the epigenetic control of cytokine gene expression and osteoclast maturation, and his studies of chromatin modifications are leading to new understanding of how the immune system becomes primed to react efficiently to future microbial or inflammatory stimuli. Dr. Jane Salmon, who serves as the Associate Dean for Faculty Affairs at Weill Cornell Medicine, has identified biomarkers that predict adverse pregnancy outcomes in patients with lupus or antiphospholipid syndrome (APS). Dr. Bella Mehta has documented the change over time in pregnancy outcomes of patients with lupus. Dr. Doruk Erkan is studying therapies that might improve outcomes of APS patients.

Rheumatology Fellowship

Anne R. Bass, M.D. Program Director

Jessica R. Berman, M.D. Program Co-Director

The Hospital for Special Surgery (HSS) rheumatology fellowship 3-year program combines a broad-based, in-depth clinical and research experience in order to deliver the highest quality academic training to rheumatology professionals.



Dr. Mary Crow's lab, in collaboration with Dr. Kyriakos A. Kirou, has demonstrated that type I interferon is a central mediator of immune dysregulation and autoimmunity in SLE and has provided insight into the role of additional molecular pathways involved in lupus nephritis.

Members of the Rheumatology Division are leading collaborative clinical research studies focused on risk factors and outcomes of total joint replacement surgery. Together with members of the orthopedic surgery, pathology and research faculty, Drs. Susan Goodman, Vivian Bykerk, Laura Donlin and others are documenting the biologic characteristics of joint tissue that are associated with rheumatoid arthritis disease flare after total joint replacement. Their work, in collaboration with the NIH-funded Accelerating Medicines Partnership, has established in vitro mechanisms to identify therapeutic agents effective in reducing synovitis. Dr. Goodman is also investigating the socioeconomic factors that impact surgical management of osteoarthritis and is directing a new Center of Excellence that is organizing outcome research in rheumatic disease patients undergoing orthopedic surgical procedures.

Iris Cantor Women's Health Center (ICWHC)



Orli R. Etingin, M.D. Medical Director, ICWHC

Vice Chair for Faculty

Lisa and Sanford B. Ehrenkranz Professor in Women's Health

Professor of Clinical Medicine

Professor of Clinical Obstetrics and Gynecology Weill Cornell Medical College

Attending Physician NewYork-Presbyterian Hospital

The 36th Annual Women's Health Symposium held in October 2018.

The Iris Cantor Health Center (ICHC) at 425 East 61st Street in Manhattan offers the most comprehensive array of healthcare services, designed specifically for women, in a single location in New York City. With more than 40,000 square feet of clinical space occupying four floors under one roof, women can access the finest prevention, screening, and treatment services in one convenient location. All of the Center's physicians are full-time faculty members of Weill Cornell Medicine and attending physicians at NewYork-Presbyterian/Weill Cornell Medical Center. A team of internists, gynecologists, radiologists, among many others, facilitate superb coordination.

The Iris Cantor Men's Health Center, for which Dr. Etingin had provided expertise and assistance during the development phase, has grown to encompass both men's health and executive health testing. The contiguity of the Women's Health Center, Men's Health Center, and the new Executive Physical Center, has enabled streamlined care for every type of patient. Located at 425 East 61st Street, the men's health practice enhances the primary care network of Weill Cornell delivering patient care that covers internal medicine, cardiology, endocrinology, hematology, and urology. It also houses the Department of Urology's Institute for Bladder and Prostate Health. Clinical

research collaborations between men's and women's Health continue.

The 36th Annual Women's Health Symposium was held on October 22, 2018 at the Citi Executive Conference Center. Entitled "Not So Sweet: The Hidden Cancer Risk of Sugar and Inflammation," the conference covered the relationship of inflammatory disease, obesity, and cancer risk. Guest speakers included Drs. Drs. Lewis C. Cantley, Director of the Sandra and Edward Meyer Cancer Center, and Dr. Andrew J. Dannenberg, Henry R. Erle, MD – Roberts Family Professor of Medicine, Professor of Medicine in Cardiothoracic Surgery, and Professor of Medicine in Surgery.

The 2019 Women's Health Symposium will be presented on October 28, 2019 and will cover management of overall wellbeing using mobile systems and applications. Entitled "Live Well: Integrative Care and Tech Based Health," invited speakers will include Dr. Alka Gupta, Assistant Professor of Medicine. Co-founder and Co-director of the Integrative Health and Wellbeing Program at NewYork-Presbyterian, and Deborah Estrin, Ph.D., The Robert V. Tishman '37 Professor at Cornell Tech and in the Computer Science Department at Cornell University. Dr. Estrin serves as Associate Dean of Cornell Tech, founder of the Health Tech Hub and she directs the Small Data Lab at Cornell Tech.



Residents & Fellows

Weill Department of Medicine





L to R: 2018 Chief Residents with Dr. Gudi (far left) and Dr. Anthony Hollenberg, Chair, WDOM (far right). Front row (L to R): Drs. Melissa Rusli, Madison Dennis, Ayman Al Jurdi. Back row (L to R): Drs. Joseph Bailey, Michael Wagner.

Dr. Kirana Gudi serves as Director of the Internal Medicine Residency Program and also as the Vice Chair for Education in the Weill Department of Medicine.

The Internal Medicine Residency Program is distinguished by a unique combination of activities and opportunities. One of the program's core principles is that house staff learn best through authentic responsibility. House staff serve as the primary provider across all aspects of patient care. Intellectual curiosity is fostered throughout the curriculum, whether exploring basic science, translational medicine, clinical expertise, or the healthcare delivery system. Residents can customize their focus, or try more than one area. Mentorship is one-on-one to help each resident thrive.

Senior Residents (PGY3)	Anthony Choi, Weill Cormell Medical College
Amit Achhra, K.J. Somaiya, India	Daniel Choi, University of Michigan Medical School
Javid Alakbarli, Istanbul University	Josephine Cool, Weill Cornell Medical College
Sarah Barenbaum, Drexel University College of Medicine	John Falcone, Drexel University College of Medicine
Jesse Bertrand, University of Miami	Deborah Fung, State University of New York Downstate
Deep Bhatt, University of Iowa, Roy J. and Lucille A. Carver	Medical Center College of Medicine Gloria Gerber, Rutgers University, Robert Wood Johnson Medical School
College of Medicine	
Rebecca Blank, Icahn School of Medicine at Mount Sinai	
,	Gaurav Ghosh, Weill Cornell Medical College
Ryan Bober, Sidney Kimmel Medical College, Thomas Jefferson	
University	Stephanie Gold, Weill Cornell Medical College
Adam Buckholz, University of Virginia School of Medicine	Yasin Hussain, Weill Cornell Medical College-Qatar
Karen Chiu, University of Pittsburgh School of Medicine	Sumaiya Iqbal, Stony Brook University School of Medicine

Residents & Fellows

Brittany Katz, The Warren Alpert Medical School of Brown University

Peter Kennel, TUM School of Medicine of Technische Universität München

Amy Kwon, Weill Cornell Medical College

Perola Lamba, Weill Cornell Medical College-Qatar

Rohan Maniar, Indiana University School of Medicine

Filipe Moura, Universidade de Brasília Faculdade de Medicina

Jorge Munoz Pineda, Albert Einstein College of Medicine of Yeshiva University

Mariella Ntamatungiro, Meharry Medical College

Maria Pabon, Universidad Nacional de Colombia Facultad de Medicina

Khanh Pham, University of Massachusetts Medical School

Ilana Prior, Geisel School of Medicine, Dartmouth

Dwindally Rosado-Rivera, San Juan Bautista School of Medicine

Samuel Rotter, University of Wisconsin School of Medicine

Madhav Seshadri, Emory University School of Medicine

Gabriel Shaya, University of Miami Miller School of Medicine

Zachary Sherman, Icahn School of Medicine at Mount Sinai

Masha Slavin, Icahn School of Medicine at Mount Sinai

Amin Soltani, Tehran University of Medical Sciences

Zachary Strasser, Weill Cornell Medical College

Colleen Tenan, New York University School of Medicine

Timothy Tiutan, University of Arizona College of Medicine

Samuel Yamshon, University of California, Davis School of Medicine

Diane Zisa, State University of New York Downstate Medical Center College of Medicine

Junior Residents (PGY2)

Frank Aguilar, University of Illinois College of Medicine

Kemal Akat, Medizinische Fakultät Heidelberg, Ruprecht-Karls-Universität Heidelberg

Eva Alba, Columbia University College of Physicians and Surgeons

Tarek Barbar, Weill Cornell Medical College-Qatar

John Bui, University of Pittsburgh School of Medicine

Samuel Chung, State University of New York Downstate Medical Center College of Medicine

Lauren Comisar, Perelman School of Medicine, University of Pennsylvania

Dan Feng, Stanford University School of Medicine

Kristina Fernandez, Virginia Commonwealth University School of Medicine

Brittney Frankel, Weill Cornell Medical College

Samuel Freedman, Lewis Katz School of Medicine, Temple University

Viktor Gamarnik, Columbia University College of Physicians and Surgeons

Ruslan Garcia, University of Miami, Leonard M. Miller School of Medicine

Jin Guo, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo

Daniel Helbig, Albert Einstein College of Medicine

Sarah Kanbour, Weill Cornell Medical College-Qatar

Lauren Kelly, Perelman School of Medicine, University of Pennsylvania

Anamil Khiyami, King Abdulaziz University College of Medicine and Allied Sciences

Alexandra King, Hofstra Northwell School of Medicine at Hofstra University

Katherine Knorr, Mayo Medical School

Amit Lakhanpal, University of California, Los Angeles David Geffen School of Medicine

Ariel Love, Albert Einstein College of Medicine

Grace Maldarelli, University of Maryland School of Medicine

Steven Mathews, Stony Brook University School of Medicine

Gregory McWilliams, Georgetown University School of Medicine

Erik Nielsen, Stony Brook University School of Medicine

Ryan Notti, Weill Cornell Medical College

Alexander O'Connell, Hofstra Northwell School of Medicine, Hofstra University

Bobak Parang, Vanderbilt University School of Medicine



Alexander Pronko, Robert Wood Johnson Medical School, Rutgers

Randy Ramsaywak, Albert Einstein College of Medicine of Yeshiva University

Raquel Rozner, New York Medical College

Ariel Schaap, New Jersey Medical School, Rutgers

Russell Simon, New York University School of Medicine

Mark Sonnick, Weill Cornell Medical College

Diala Steitieh, Weill Cornell Medical College-Qatar

Sarah Stoots, Icahn School of Medicine, Mount Sinai

Michael Sun, New Jersey Medical School, Rutgers

Montreh Tavakkoli, University of California, Los Angeles David Geffen School of Medicine

Shanna Tucker, Harvard Medical School

Ozan Unlu, Hacettepe University - Turkey

Maya Viavant, University of California, Davis, School of Medicine

Dario Villamar, Weill Cornell Medical College

Julian Waksal, Tufts University School of Medicine

Intern Residents (PGY1)

Youmna Abdelghany, Weill Cornell Medical College-Qatar Ankita Agarwal, New Jersey Medical School, Rutgers Preston Atteberry, Icahn School of Medicine, Mount Sinai Alexander Bain, Perelman School of Medicine, University of Pennsylvania Lauren Balkan, State University of New York Downstate Medical Center College of Medicine Dan Benenson, Weill Cornell Medical College Matthew Brandorff, Stony Brook University School of Medicine Allen Chen, Harvard Medical School Brian Chernak, State University of New York Downstate Medical Center College of Medicine Philip Choi, Columbia University College of Physicians and Surgeons Chou Chou, Weill Cornell Medical College Emily Coskun, University of Kansas School of Medicine

Rachel Engelberg, University at Buffalo Asia Gobourne, Weill Cornell Medical College Jordan Goldstein, Emory University School of Medicine Benjamin Gordon, Weill Cornell Medical College Marvah Hill Pierre-Louis Geisel, Dartmouth Angela Hu, Temple University Ramsey Kalil, Stony Brook University School of Medicine Kyle Koster, University of Rochester Kristine Lacuna, State University of New York, University at Buffalo Jacobs School of Medicine and Biomedical Sciences Justin Lebenthal, Robert Wood Johnson Medical School, Rutgers Neil Lim, Northwestern University Feinberg School of Medicine Anna Mertelsmann, University of Hamburg Xiaoli Mi, Harvard Medical School Pedram Navid-Azarbaijani, Weill Cornell Medical College Cecilia Nicol, Weill Cornell Medical College Stephanie Pagliuca, Duke University School of Medicine Akash Patel, Rutgers, New Jersey Medical School Kharisa Rachmasari, Weill Cornell Medical College-Qatar Rayhan Saiani, Weill Cornell Medical College Claire Sathe, New Jersey Medical School, Rutgers Hector Sepulveda Alemany, University of Puerto Rico School of Medicine Anupriya Singhal, Weill Cornell Medical College Leland Soiefer, New York University School of Medicine Robert Stanley, Albert Einstein College of Medicine of Yeshiva University Catherine Stoeckle, Harvard Medical School Shyam Sundaresh, Case Western Reserve University Gaurav Varma, Drexel University College of Medicine Antonio Velez, University of Puerto Rico School of Medicine Kenneth Vera, Yale University Nabeel Wahid, University of California, Irvine Xiaohui Wang, University of Kentucky Xiaodi Wu, Washington University-St. Louis



Professional Pursuits

Subspecialty Fellowship Appointments

Cardiology

Kemal Akat, Vanderbilt University

Javid Alakbarli, Baylor College of Medicine-Texas Heart Institute

Yasin Hussain, Yale University

Peter Kennel, NewYork-Presbyterian Hospital/Columbia University

Filipe Moura, Brigham and Women's Hospital

Gabriel Shaya, Johns Hopkins Medical Center

Endocrinology

John Falcone, NewYork-Presbyterian Hospital/Weill Cornell Medical Center

Gastroenterology

Adam Buckholz, NewYork-Presbyterian Hospital/Weill Cornell Medical Center

Karen Chiu, University of Pittsburgh Medical Center

Anthony Choi, NewYork-Presbyterian Hospital/Weill Cornell Medical Center

Gaurav Ghosh, NewYork-Presbyterian Hospital/Weill Cornell Medical Center

Stephanie Gold, Icahn School of Medicine at Mt. Sinai

Amin Soltani, Massachusetts General Hospital

Hematology and Medical Oncology Dan Feng, Memorial Sloan-Kettering Cancer Center

Gloria Gerber, Johns Hopkins Medical Center

Katherine Knorr, Memorial Sloan-Kettering Cancer Center

Rohan Maniar, NewYork-Presbyterian Hospital/Columbia University Ryan Notti, Memorial Sloan-Kettering Cancer Center

Bobak Parang, NewYork-Presbyterian Hospital/Weill Cornell Medical Center

Madhav Seshadri, NewYork-Presbyterian Hospital/ Weill Cornell Medical Center

Samuel Yamshon, NewYork-Presbyterian Hospital/Weill Cornell Medical Center

Infectious Disease

Amit Achhra, Massachusetts General Hospital-Brigham and Women's Hospital

Khanh Pham, NewYork-Presbyterian Hospital/Weill Cornell Medical Center

Grace Maldarelli, NewYork-Presbyterian Hospital/Weill Cornell Medical Center

Nephrology

Perola Lamba, NewYork-Presbyterian Hospital/Weill Cornell Medical Center

Obesity

Sarah Barenbaum, Weill Cornell Medicine

Ilana Prior, Weill Cornell Medicine

Pulmonary and Critical Care Medicine

Jorge Munoz Pineda, Stanford University

Rheumatology Rebecca Blank, New York University

Amit Lakhanpal, Hospital for Special Surgery

Diane Zisa, Hospital for Special Surgery

Other Professional Pursuits

Zachary Strasser, NLM Biomedical Informatics and Data Science, Harvard Medical School

Chief Residencies

Daniel Choi, Chief Medical Resident, NewYork-Presbyterian Hospital/Weill Cornell Medicine

Brittany Katz, Quality Improvement Chief Resident, NewYork-Presbyterian Hospital/ Weill Cornell Medicine Maria Pabon, Chief Medical Resident, NewYork-Presbyterian Hospital/ Weill Cornell Medicine

Samuel Rotter, Chief Medical Resident, Memorial Sloan-Kettering Cancer Center

Zachary Sherman, Chief Medical Resident, NewYork-Presbyterian Hospital/ Weill Cornell Medicine

Masha Slavin, Ambulatory Chief Resident, NewYork-Presbyterian Hospital/ Weill Cornell Medicine

Hospitalists

Jesse Bertrand, Hackensack University Medical Center

Josephine Cool, Beth Israel Deaconess Medical Center

Mariella Ntamatungiro, Columbia University Medical Center

Academic Appointments

Deep Bhatt, Instructor in Medicine, NewYork-Presbyterian Hospital/ Weill Cornell Medicine

Ryan Bober, Instructor in Medicine, NewYork-Presbyterian Hospital/ Weill Cornell Medicine

Deborah Fung, Instructor in Medicine, NewYork-Presbyterian Hospital/ Weill Cornell Medicine

Sumaiya Iqbal, Faculty, Unity Faculty Partners Rochester

Amy Kwon, Assistant Professor in Medicine, Oregon Health and Science University

Dwindally Rosado-Rivera, Instructor in Medicine, Weill Cornell Medicine-Tribeca

Colleen Tenan, Primary Care Physician, Westmed Medical Group

Timothy Tiutan, Assistant Attending, Memorial Sloan Kettering Cancer Center

Financial Report

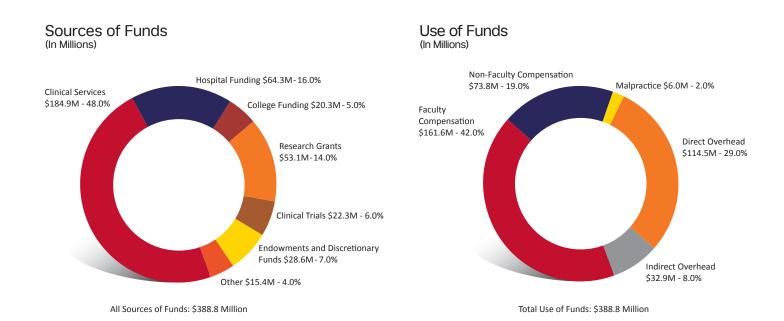
The Weill Department of Medicine continued to experience solid financial growth in fiscal year 2018 with total operating funds equaling \$388.8 million, as compared with \$357.9 million in fiscal year 2017.

The department's clinical enterprise revenue increased by 4.04% over fiscal year 2018. Patient care activities, as measured in outpatient encounters, remained steady at 275,599. Work RVUs increased to 1,154,846.

The department's research grants activity in 2018 equaled \$53.1 million. Industry sponsored research increased in 2018 to \$22.3 million.

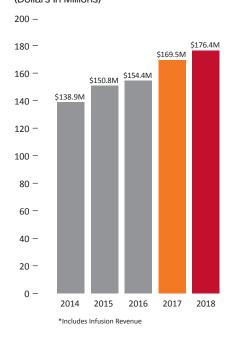
Medical education mission activities, which encompasses medical student education, the internal medicine residency program, and our many fellowship programs, continued to be a priority for the Weill Department of Medicine during fiscal year 2018.

The department's largest expense is its faculty, management, and staff costs, which consume almost 61% of the total annual budget. The remaining 39% of expenses is distributed among direct expenses (29%), indirect expenses (8%), and malpractice liability insurance (2%).

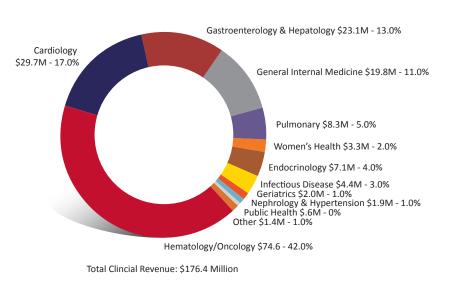


Financial Report

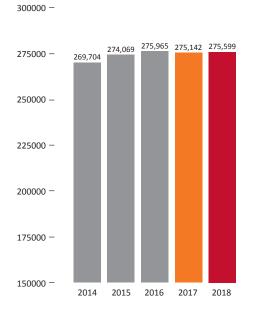
Annual Clinical Revenue Trend (Dollars In Millions)*



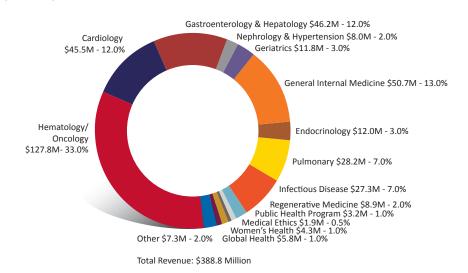
Clinical Revenue by Division



Annual Outpatient Visits

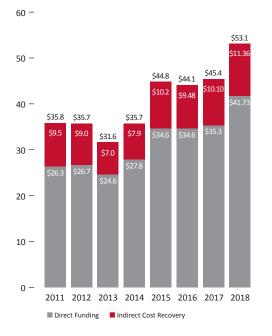


All Funds by Division Total Revenue (In Millions)





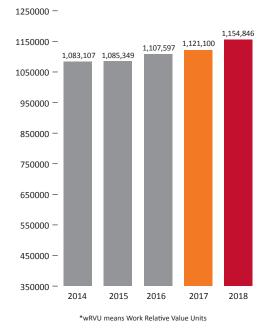
Research and Grant Expenditures Trend (In Millions)



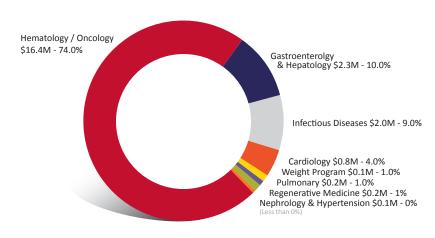
Research and Grants (In Millions) Infectious Disease Medical Ethics \$.0M - 0% Nephrology & Hypertension \$1.6M - 3.0% \$11.1M - 21.0% Public Health Programs \$0.9M - 2.0% Pulmonary \$7.5M - 14.0% Hematology/ Oncology \$7.5M - 14.0% **Regenerative Medicine** \$6.47M - 12.0% Global Health \$3.7M - 7.0% Cardiology \$1.5M - 3.0% CEESR \$.0M - 0% General Internal Endocrinology \$0.4M - 1.0% MedicineM \$2.9M - 5.0% Geriatrics \$3.1M - 6.0% Gastroenterology & Hepatology \$6.6M - 12.0%

Total: \$53.1 Million

Annual wRVU Trend*



Clinical Trials Revenue (In Millions)



Total Clinical Trials Revenue: \$22.26 Million

Contacts



Chair Office

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Iris Cantor Women's Health Center Orli R. Etingin, M.D., Director Ellen Connelly, Administrator Tel: (212) 821-0558

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For further information about the Weill Department of Medicine, please visit our website at https://medicine.weill.cornell.edu/

IN MEMORIAM (2019) – WDOM Faculty

Dr. Arthur Heller, a member of the Weill Cornell Medicine family for over three decades, was a native New Yorker and a graduate of Bronx High School of Science. After training at SUNY Brooklyn, where he served as a Chief Medical Resident, he did a Fellowship in Clinical Nutrition at Memorial Hospital under the direction of Professor Richard Rivlin in 1982. Following a GI fellowship in Brooklyn, he joined the faculty in the Division of Nutrition at Weill Cornell in 1986. He subsequently had been a member of the voluntary faculty in the Division of Gastroenterology and Hepatology and active in clinical and teaching missions. He was also a member of the Scientific Advisory Committee of the Crohn's and Colitis Foundation. A deeply intelligent, sweet, kind, and excellent physician, he was an invaluable member of the WDOM faculty in his role as a clinician and as a mentor to students, residents, internists, and gastroenterologists. He will be sorely missed by those who knew him, both his patients and his colleagues.

Dr. Thomas KC King served on the clinical faculty of the Division of Pulmonary and Critical Care Medicine from 1970 to 2017. A Professor of Clinical Medicine, he trained residents and fellows in the Medical Intensive Care Unit, Step-down Unit, and in outpatient practices. King received Weill Cornell's Elliot Hochstein Award for Teaching in recognition of his outstanding dedication to the education of medical students. Dr. King also served as Interim Chief of Pulmonary and Critical Care Medicine twice (1982-1985 and 1991-1993). As an investigator, he made significant contributions to pulmonary research with studies that have provided insight on the basic principles of respiratory physiology and pathophysiology. Dr. King was President of the New York Trudeau Society (now the New York State Thoracic Society), the American Chinese Medical Society, and he formed the Briscoe Lung Club, New York, which has been renamed the Briscoe-King Lung Club in his honor. Dr. King obtained his M.D. from the University of Edinburgh. His initial training was at Queens University and Royal Victoria Hospital in Belfast, UK. In 1965, he came to the U.S. as an Eli Lilly International Fellow in the cardio-pulmonary laboratory of the Columbia University Division of Bellevue Hospital and stayed on as a Fellow of the Polachek Foundation in the same laboratory. He was also a Nuffield Foundation Research Fellow in the Department of Social and Occupational Medicine at the Welsh National School of Medicine in Cardiff, UK.

Dr. Kristy Richards, an extraordinarily talented and dedicated physician-scientist in the field of lymphoma, was an Associate Professor of Medicine in the Division of Hematology and Medical Oncology. A medical oncologist and investigator, Dr. Richards worked at both Cornell University, Ithaca campus, Department of Biomedical Sciences in the College of Veterinary Medicine, and at Weill Cornell Medicine, New York City, Sandra and Edward Meyer Cancer Center where she had her own laboratory. She co-directed the Cross-Campus Experimental Therapeutics Program at Cornell University and played a critical role in connecting research collaborations between the Weill Cornell Medicine and Cornell University campuses. After earning her undergraduate degree from Cornell University, followed by a Ph.D. in Genetics and an M.D. from Stanford University, she completed residency training in Internal Medicine at Brigham and Women's Hospital and a Hematology/Oncology Fellowship at the MD Anderson Cancer Center. Dr. Richards was a member of the American Society of Hematology Advocacy Leadership Institute and a Faculty Fellow of the Cornell University Atkinson Center for a Sustainable Future.

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