Renowned GI Physician-Scientists Lead Cancer Care and Research Programs at NewYork-Presbyterian

Anil K. Rustgi, MD: A Global Leader in GI Cancers

Anil K. Rustgi, MD, a preeminent cancer physician-scientist, has been appointed Director of the Herbert Irving Comprehensive Cancer Center, and Chief of the Cancer Service, NewYork-Presbyterian/Columbia University Irving Medical Center, and Irving Professor of Medicine and Associate Dean of Oncology at Columbia University Vagelos College of Physicians and Surgeons. The Herbert Irving Comprehensive Cancer Center — one of only four National Cancer Institute-designated comprehensive cancer centers in New York State — brings together world-renowned experts, scientists, and physicians from every corner of the cancer landscape. The Cancer Center is now entering an exciting time of growth, innovation, and expansion, including plans for a new clinical cancer center building on the NewYork-Presbyterian/Columbia campus.

“I have had longstanding collaborations with colleagues at Columbia, including joint grants and publications, and so over time, I have been making the trip here at least once or twice a year,” says Dr. Rustgi, who came on board in April 2019.

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Manuel Hidalgo, MD, PhD: A Pioneer in Pancreatic Cancer

Manuel Hidalgo, MD, PhD, has joined NewYork-Presbyterian/Weill Cornell Medical Center as the newly appointed Chief of the Division of Hematology and Medical Oncology. Dr. Hidalgo oversees a division comprised of nearly 100 physicians and advanced practitioners, 13 fellows, and 14 research groups focused on basic and translational research in hematology, vascular biology, and oncology. Specialized programs include medical oncology, blood cancers, non-malignant hematology and vascular diseases, and bone marrow and stem cell transplantation. He also serves on the leadership team at the Sandra and Edward Meyer Cancer Center at Weill Cornell Medicine.

“There is a real opportunity for us to come together and build a team that will take our institutions to the next level in cancer care and innovation.”

— Dr. Manuel Hidalgo

Dr. Hidalgo succeeds David M. Nanus, MD, who has led the division since 2004, first as Co-Chief with Barbara Hempstead, MD, until 2012, then as Division Chief. Dr. Nanus will remain on Weill Cornell Medicine’s faculty and serve as Director of NewYork-Presbyterian and Weill Cornell Medicine’s Healthcare Services’ Cancer Program.

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“...their commitment to excellence in research, education, and clinical care is part of the very fabric of the Cancer Center — and that has been longstanding. I have been impressed with the depth and breadth of basic science research, the growth of translational research, clinical trials, clinical care, and service in the community, both on campus as well as with our partner hospitals.”

Dr. Rustgi joins NewYork-Presbyterian from the University of Pennsylvania’s Perelman School of Medicine, where for the past two decades he served as the T. Grier Miller Professor of Medicine and Genetics, Chief of the Division of Gastroenterology, and Director of the NIH/NIDDK P30 Center for Molecular Studies in Digestive and Liver Diseases. He has been President of the American Gastroenterological Association, Editor-in-Chief of Gastroenterology, President of the International Society of Gastroenterological Carcinogenesis, and beginning in 2020, Dr. Rustgi will serve as President of the American Pancreatic Association.

After graduating summa cum laude from Yale University with a bachelor’s degree in molecular biophysics and biochemistry, Dr. Rustgi earned his medical degree at Duke University School of Medicine. Following an internal medicine residency at Beth Israel Deaconess Medical Center and a gastroenterology fellowship at Massachusetts General Hospital, he joined the University of Pennsylvania in 1998.

A Prodigious Scientist in GI Cancers

In 2017, Dr. Rustgi was elected by his peers as a Fellow of the American Association for the Advancement of Science, the world’s largest general scientific body, recognizing his numerous contributions to cancer biology. That same year, the American Gastroenterological Society presented its highest honor, the Julius Friedenwald Medal, to Dr. Rustgi for his extraordinary contributions to the field of gastroenterology and the organization over several decades. He was also elected to the American Society of Clinical Investigation and Association of American Physicians and holds an American Cancer Society Research Professorship, recognizing his “history of pioneering, influential work that’s continuing to change the direction of cancer research and...mentoring people who have become successful in cancer research.”

A major influence in the field of gastrointestinal cancer, Dr. Rustgi focuses his research on molecular genetics and factors in the tumor microenvironment that lead to the development, progression, and metastasis of GI cancers, including cancers of the esophagus, pancreas, and colon. Dr. Rustgi and his research team have provided innovative scientific contributions to the development of three-dimensional (3D) mouse and human origin cell culture systems and genetically engineered mouse models to investigate molecular mechanisms with the goal of improving molecular diagnostics and experimental therapeutics in patients as well as precision or personalized oncology. They are also credited with the identification of p120 catenin, a protein located in the cytoplasm of cells, as a tumor suppressor gene, and the discovery that human cyclin D1, a major cell cycle regulatory protein, is overexpressed in the majority of esophageal tumors, leading to new therapeutic avenues in these cancers. The NIH and NCI fund his research through a Program Project in esophageal cancer (the only one in the U.S.), two R01 grants, and a U54 grant. He is also funded through the American Cancer Society.

Dr. Rustgi has published more than 300 studies and is the editor of several textbooks on GI cancers. His work has appeared in peer-reviewed journals, including Cancer Cell, Cell Stem Cell, Genes and Development, Gastroenterology, Journal of Clinical Investigation, Nature, and Nature Genetics, amongst others.

Priorities for the Herbert Irving Comprehensive Cancer Center

Dr. Rustgi believes that critical research areas in cancer today include basic mechanisms of tumor initiation, tumor micro-environment and tumor metastasis; translational medicine for early detection, biomarkers of cancer progression and recurrence; immuno-oncology; overcoming therapeutic resistance, as well as employing new strategies in combinatorial therapeutics; and the implementation of cancer care and prevention initiatives in local and regional communities with extension of discoveries on the global stage. With this in mind, Dr. Rustgi, has outlined multiple interrelated priorities for the Herbert Irving Comprehensive Cancer Center:

- enhancing basic research and its integration with translational medicine and core facilities
- expanding investigator-initiated clinical trials
- emphasizing efforts in cancer genomics and precision oncology
- developing population science programs in the catchment area, as well as in global health
- training the next generation of leaders in cancer research and cancer care
- catalyzing programs in diversity and inclusion

Dr. Rustgi will maintain his clinical practice and continue his own research endeavors, with a goal to bridge the preclinical arena to clinical domains. “Research and clinical care are part of my identity as a physician-scientist,” he says. “I enjoy both pursuits, leading to exciting interactions with trainees, colleagues, and patients.”

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Manuel Hidalgo, MD, PhD: A Pioneer in Pancreatic Cancer

which will unify oncology programs at NewYork-Presbyterian’s regional hospitals. He will also continue to serve on the Meyer Cancer Center leadership team.

Prior to joining Weill Cornell, Dr. Hidalgo served as the Theodore W. and Evelyn G. Berenson Professor of Medicine at Harvard Medical School and Chief of the Division of Hematology/Oncology and Clinical Director of the Rosenberg Clinical Cancer Center at Beth Israel Deaconess Medical Center in Boston, as well as Deputy Associate Director for Clinical Sciences at the Dana-Farber/Harvard Cancer Center in Boston. He has also served as Director of the Gastrointestinal Oncology Program at the Kimmel Comprehensive Cancer Center at Johns Hopkins University and Director of the Clinical Research Program and Vice Director of Translational Research at the Spanish National Cancer Research Centre in Madrid.

Dr. Hidalgo obtained his medical degree from the University of Navarra in Pamplona, Spain, and a doctorate in infectious diseases and cancer from the University Autónoma of Madrid, Spain. He completed residency training in medical oncology at the Hospital 12 de Octubre in Madrid and a fellowship in medical oncology at the University of Texas Health Science Center in San Antonio.

A Premier Investigator in Pancreatic Cancer

For more than two decades, Dr. Hidalgo has pursued laboratory and clinical research with a major focus on drug development in pancreatic cancer. He has developed, tested, and helmed the early clinical development of more than 50 new anticancer agents for pancreatic and other solid tumor cancers. Three of those agents, including nab-paclitaxel, are now approved by the U.S. Food and Drug Administration for treatment of pancreatic and other GI cancers. His team also pioneered the development of mouse avatars to pre-test cancer treatments and he continues to use mouse models to develop personalized medicine opportunities.

“Our most significant contribution has been the pioneering of patient derived xenograft (PDX) models for drug screening, biomarker development, and personalized medicine in pancreatic ductal adenocarcinoma,” says Dr. Hidalgo. “We initiated the development of patient derived xenograft models of pancreas cancer as a platform for translational studies in this disease. Using well-characterized PDX models we identified nab-paclitaxel activity in pancreas cancer, a work that paved the way for clinical studies that eventually led to the approval of the drug. We also have identified demcizumab and palbociclib that are now in early clinical development as well. Our immediate goal is to develop precision medicine strategies, incorporating immune treatment approaches both in preclinical models and in clinical studies of pancreatic cancer.”

Dr. Hidalgo’s research is funded by the National Cancer Institute and the European Research Council. He has published more than 220 articles in top-tier journals, including the Journal of Clinical Oncology, Clinical Cancer Research, and Cancer Discovery, where he also serves as a scientific editor.

Looking Ahead

Under Dr. Hidalgo’s direction and working with the Joint Clinical Trials Office at Weill Cornell Medicine and NewYork-Presbyterian/Weill Cornell, the Division of Hematology and Medical Oncology will enhance its already robust clinical trials portfolio. Says Dr. Hidalgo, “Our priority is ensuring that our clinical trials portfolio is modern, comprehensive, and diverse so patients with advanced cancers have the opportunity to receive the latest therapies.”

Dr. Hidalgo seeks to foster new opportunities for scientific discovery and clinical care through collaborations with both the Caryl and Israel Englander Institute for Precision Medicine and the Meyer Cancer Center. “I want the division to capitalize on all of the great projects and scientific innovations that are being developed in the lab at the Meyer Cancer Center and move them to the clinic,” says Dr. Hidalgo. “We want to be able to provide basic scientists with critical feedback they can then use to orient and refine their research.”

Going forward, Dr. Hidalgo will lead the effort to have NewYork-Presbyterian/Weill Cornell become a National Cancer Institute-designated Comprehensive Cancer Center. “The unified mission of Weill Cornell Medicine and NewYork-Presbyterian to offer the best, most cutting-edge cancer treatments, and the shared goal of curing this disease is very exciting to me,” says Dr. Hidalgo. “There is a real opportunity for us to come together and build a team that will take our institutions to the next level in cancer care and innovation. We are looking for excellence – in training, research, and care – as we aim to have a lasting impact, offering hope to cancer patients across the city.”

For More Information

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