NYU Langone Health

OUR COVID-19 EFFORTS

Read about NYU Langone Health's response to the challenges of the COVID-19 pandemic.
See insert.

Gastroenterology & GI Surgery

2020 HIGHLIGHTS

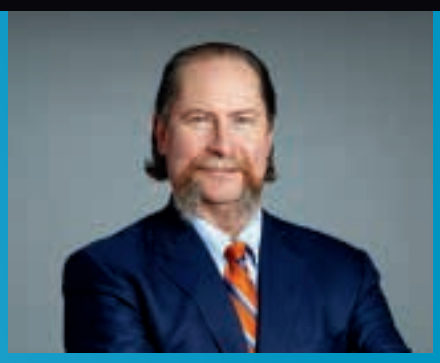
Cover image: Digestive system.
RENDERING: SKETCHFAB

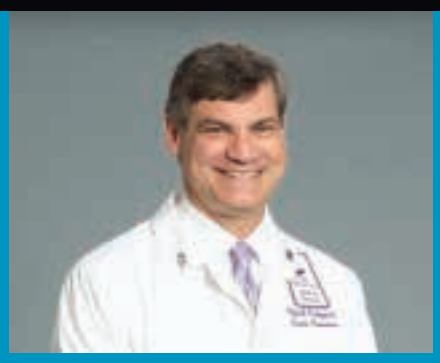
ROBERT MONTGOMERY, MD, DPHIL

H. Leon Pachter, MD, Professor of Surgery
Chair, Department of Surgery
Director, NYU Langone Transplant Institute

MARK B. POCHAPIN, MD

Sholtz/Leeds Professor of Gastroenterology
Director, Division of Gastroenterology & Hepatology
Vice Chair, Clinical Affairs,
Department of Medicine





MESSAGE FROM THE CHAIR & DIRECTOR

We are thrilled to share with you some of the highlights of our work in Gastroenterology and GI Surgery over the past year.

We invite you to read about how our multidisciplinary team worked to diagnose and treat a patient with an unusual case of refractory gastroesophageal reflux disease and recurrent paraesophageal hernia causing esophageal compression, and how our IBD Center experts revealed that long rectal cuff is an important, potentially preventable risk factor for pouch failure following minimally invasive IPAA. In addition to the innovative new educational programming being offered by our physician leaders, we further expanded our pancreatic disease offerings and welcomed two renowned new recruits—advanced endoscopist and translational researcher Tamas Gonda, MD, and pancreatic surgeon, surgical oncologist, and translational researcher Christopher L. Wolfgang, MD, PhD.

As always, this year we look forward to collaborating with our colleagues nationwide to help lead the advancement of scientific knowledge, medical education, and, ultimately, the provision of state-of-the-art clinical care. Please read on to learn about these and other exciting advances.

Pioneering

PANCREATIC RESEARCH AND SURGERY

Specialized

ADVANCED FELLOWSHIPS IN TRANSPLANT HEPATOLOGY, ADVANCED ENDOSCOPY, AND IBD

Top 10

IN GASTROENTEROLOGY & GI SURGERY IN *U.S. NEWS & WORLD REPORT*'S BEST HOSPITALS

BEST HOSPITALS U.S.News & WORLD REPORT NATIONAL GASTROENTEROLOGY & GI SURGERY 2020-21

In a pilot study led by gastroenterologist Mark B. Pochapin, MD, the Micro-Tech Napoleon endoscopic gauge helped doctors to more accurately measure polyp size, better informing post-colonoscopy clinical management.

Endoscopic Measuring Tool Helps Assess Polyps During Colonoscopy & Inform Surveillance Intervals

Device Enables Gastroenterologists to More Accurately Follow Guidelines

STUDY SHOWS NEW MEASURING DEVICE FACILITATES DOCUMENTATION

A new endoscopic measuring device offers potential to help clinicians more accurately assess polyp size during colonoscopy and recommend the appropriate interval for follow-up surveillance, according to results from a pilot study led by Mark B. Pochapin, MD, the Sholtz/Leeds Professor of Gastroenterology at NYU Grossman School of Medicine, director of the Division of Gastroenterology and Hepatology, and vice chair for clinical affairs in the Department of Medicine at NYU Langone Health.

The Micro-Tech endoscopic gauge—dubbed the "Napoleon"—is capable of measuring polyps in 1-mm increments. Composed of a catheter with a 15-mm ruler, the flexible and rotatable device is inserted through the endoscope during colonoscopy, and then placed behind, in front, or adjacent to the polyp, where physicians can easily take a photograph for documentation.

ASSESSMENT OF POLYP SIZE

It is currently standard practice for endoscopists to "estimate" rather than measure polyp size using endoscopic visualization, which often leads to misclassifying polyps, says Dr. Pochapin, who presented findings from the study during the American College of Gastroenterology's 2020 Annual Meeting in October.

> *Miscalculating polyp size can lead physicians to misclassify patients' risk and therefore recommend longer or shorter intervals than necessary between colonoscopies."*
>
> **—Mark B. Pochapin, MD**

In the pilot study, for example, four out of six physicians overestimated polyp size, leading them to place polyps in a larger size category than warranted based on actual measurements.

Postprocedural histologic exams of polyps may also lead to inaccurate assessment of polyp size, notes Dr. Pochapin, because the tissue can shrink when devascularized or placed in formalin. The Napoleon device enables precise measurements, allowing physicians to document accurately the original polyp size. This, in turn, has significant clinical implications in that the polyp size is a key factor in determining and recommending the appropriate time interval for follow-up post-polypectomy surveillance.

"Polyp size and number are key factors in our recommended colonoscopy surveillance guidelines," says Dr. Pochapin. "Miscalculating polyp size can lead physicians to misclassify patients' risk and therefore recommend longer or shorter intervals than necessary between colonoscopies."

IMPLICATIONS FOR SURVEILLANCE DECISIONS

For the pilot study, Dr. Pochapin and colleagues evaluated 23 patients, age 50 to 85 years, who were having routine colonoscopy screening.

Physicians evaluated all polyps, first "estimating" their size visually and then measuring them using the device. Polyps were placed into 1 of 3 categories: diminutive (1 to 5 mm), small (6 to 9 mm), or large (≥10 mm). Of a total of 36 polyps, 3 were downgraded to a smaller size category after measurement with the Napoleon—1 dropped from small to diminutive, and 2 dropped from large to small.

"Downgrading the two polyps from large to small changed the recommended Multi-Society Task Force surveillance interval from 3 years to 7 to 10 years," Dr. Pochapin says. "Although small, our study demonstrates that a precise measurement tool can dramatically alter clinical management following colonoscopy."

Accurate measurements afforded by a small endoscopic ruler can also be a valuable tool to help trainees better understand polyp size early in their endoscopic careers. Utilizing the Napoleon when learning colonoscopy technique may provide trainees an early guide to more accurately assess polyp size. The use of this device as a training tool is currently being investigated.

According to Dr. Pochapin, "Precise measurement techniques enable us to more accurately follow guidelines for surveillance colonoscopy interval recommendations." ■

Disclosures: Mark B. Pochapin, MD, is the inventor and has intellectual property rights with Micro-Tech for the Napoleon device.

World-Renowned Transplant Surgeon to Lead Department of Surgery

Developing Innovative Protocols and Making Significant Contributions Toward Increasing the Availability of Organs for Transplant

ROBERT MONTGOMERY, MD, DPHIL, APPOINTED CHAIR

Robert Montgomery, MD, DPhil, the H. Leon Pachter, MD, Professor of Surgery, a pioneering surgeon, and director of the NYU Langone Transplant Institute, has been appointed chair of the Department of Surgery. He assumed his new post on September 1, 2020.

H. Leon Pachter, MD, the George David Stewart Professor of Surgery, who has had a distinguished tenure as chair of the department since 2007, will remain a member of the faculty as chair emeritus. In honor of Dr. Pachter's many contributions to the institution and the field, future chairs of the department will also hold the professorship in his name.

An internationally renowned surgeon, Dr. Montgomery joined the faculty of NYU School of Medicine—now NYU Grossman School of Medicine—in 2016 from The Johns Hopkins Hospital, where he was part of the team that pioneered a laparoscopic technique for procuring a kidney for live donation that is now standard practice. Under his leadership, the Transplant Institute at NYU Langone has been developing innovative protocols and making significant contributions toward increasing the availability of organs for transplant.

Dr. Montgomery made major headlines himself when, in 2018, the team he assembled performed a heart transplant on him. In yet another example of the game-changing advances he is helping bring about, he accepted a heart that was positive for hepatitis C—organs for which he has strongly advocated for other recipients, including those in the heart, lung, kidney, and liver programs. Thanks to protocols he helped develop, these organs can now be made safe with antiviral medications.

Before joining NYU Langone, Dr. Montgomery developed a system of multiway donor exchanges, also called "domino" exchanges, facilitating transplants when an intended organ recipient has a donor who is incompatible. He has created techniques such as desensitization therapy to reduce the risk of organ rejection, and has performed groundbreaking research on the possible use of organs from genetically modified animals to address the dire shortages of organs available for transplant.

"Dr. Montgomery has made a name for himself in the field of transplant surgery, not only as an innovator and leader, but as a grateful patient," says Robert I. Grossman, MD, dean and CEO of NYU Langone Health. "Under his leadership, the Department of Surgery will continue to push the envelope on behalf of our patients to ensure we continue to provide world-class care."

"We thank Dr. Pachter for his leadership of the department, which saw tremendous growth—tripling in size during his tenure," says Dr. Grossman. "His commitment to patients, trainees, and his faculty embodies the principles of a great leader and outstanding physician."

ABOUT DR. MONTGOMERY

After graduating magna cum laude with a bachelor of science in biology from St. Lawrence University, Dr. Montgomery graduated with honors from the University of Rochester School of Medicine, and received his doctor of philosophy in molecular immunology from Balliol College at the University of Oxford, England. He completed his general surgical training, postdoctoral fellowship in human molecular genetics, and transplantation surgery fellowship at The Johns Hopkins Hospital.

A prolific researcher and educator, Dr. Montgomery has authored or co-authored more than 275 peer-reviewed publications (cited more than 25,000 times) and given 250 invited or named lectures. In addition to his many academic honors and distinctions, including a Fulbright Scholarship and a Thomas J. Watson Fellowship, in 2019 the Greater New York Hospital Association presented him with the Profile in Courage Award. He appears in the *Guinness World Records 2010* book for the most kidney transplants performed in one day.

"The Department of Surgery at NYU Langone enjoys a distinguished history of discovery and innovation, which has been further enhanced under the exemplary leadership of Dr. Leon Pachter," Dr. Montgomery says. "I am extremely excited to accept this new position, and I look forward to this extraordinary opportunity to advance NYU Langone's trifold commitment to education, research, and clinical care." ■

Team Resolves Refractory Gastroesophageal Reflux Disease & Recurrent Paraesophageal Hernia Causing Esophageal Compression

Center Team Combines Advanced Esophageal Physiology Diagnostics and Robotic Surgery

DYSPHAGIA IMPACTS QUALITY OF LIFE

Guided by advanced esophageal physiology diagnostics, surgeons at NYU Langone's Center for Esophageal Health successfully performed robotic revisional surgery on a 54-year-old woman who presented with debilitating symptoms, including "stabbing pain after meals," choking, dysphagia, and daily heartburn unresponsive to medical therapy.

The woman had a history of gastroesophageal reflux disease (GERD), for which she had surgery several decades earlier, and was taking immunosuppressant therapy for Crohn's disease. Previous procedures to dilate her upper esophagus had failed to relieve symptoms of dysphagia and choking, which were severely interfering with her quality of life and had forced her to take a leave of absence from her job as a teacher.

PREVIOUS EFFORTS FAIL TO RELIEVE SYMPTOMS

While in her early 20s, the patient had an open Nissen fundoplication surgery using a 9-in incision for GERD, a procedure that wraps the stomach completely around the lower esophagus to create a new functional valve preventing reflux. Endoscopic studies performed before she was seen at NYU Langone suggested that a stricture or narrowing had developed in her lower esophagus with upstream dilation and tortuosity of the esophagus, accompanied by a paraesophageal hernia. Her referring doctors outside of NYU Langone had also considered a diagnosis of achalasia, a disorder associated with narrowing that impedes the ability of the esophagus to contract and relax appropriately during swallowing. Several endoscopic-guided dilations were attempted in an effort to stretch her esophageal passage, but the procedures failed to resolve her symptoms.

The patient was advised against surgery due to prior open surgery causing significant adhesions and the risks of inadvertent injury to the esophagus, stomach, or vagus nerves in the presence of extensive scar tissue. The woman was also taking immunosuppressive medications for Crohn's disease—including high doses of aminosalicylates and infliximab—which increase the risks of postsurgical infection and impaired wound healing. At a crossroads, she then sought a second opinion at NYU Langone.

NYU LANGONE PERFORMS ADVANCED WORKUP

The patient scheduled a consultation with Tanuja Damani, MD, surgical director of the Center for Esophageal Health and associate professor in NYU Langone's Department of Surgery. Dr. Damani conferred with Abraham R. Khan, MD, the center's medical director and associate professor in the Department of Medicine, who specializes in neurogastroenterology and motility disorders of the upper gastrointestinal (GI) tract.

The NYU Langone team conducted an extensive workup. First, Dr. Khan did a detailed assessment of the patient's esophagus using a functional lumen imaging probe (FLIP), a minimally invasive device that simultaneously measures the diameter and contractility of the esophagus under a sedated upper endoscopy. The diagnostic evaluation revealed a likely extrinsic obstruction at the junction where the esophagus joins the stomach, preventing the lower esophageal sphincter from opening appropriately.

The findings did not support a diagnosis of achalasia and instead singled out a paraesophageal hiatal hernia as the root problem. "Our workup also eliminated the need to perform an esophageal manometry, one of the standard tests done to exclude achalasia," notes Dr. Khan, "which would have been

Tanuja Damani, MD (Left), and Abraham R. Khan, MD (Right)

Combining diagnostic and surgical teamwork, Center for Esophageal Health experts perform an advanced workup and revisional surgery to resolve choking symptoms for a patient with a history of gastroesophageal reflux disease.

PHOTO: CHRISCHRISW/GETTY

particularly difficult and uncomfortable in this case as it requires the patient to be awake during placement of an intranasal catheter to assess swallowing function, and she had an obstructed lower esophagus."

ROBOTIC SURGERY REPAIR LEADS TO SUCCESSFUL OUTCOME

With a specific diagnosis in hand, Dr. Khan and Dr. Damani recommended proceeding with robotic revisional surgery. Although minimally invasive revisional surgery after prior open surgery carries risks, they are significantly mitigated in high-volume centers like NYU Langone where surgeons have extensive experience and expertise in revisional foregut and complex robotic procedures.

"We also considered that previous attempts to control her symptoms with medications and endoscopic procedures had failed," says Dr. Damani. "At the same time, the symptoms had become debilitating and were severely curtailing her ability to enjoy food and pursue her daily activities. Revisional surgery was clearly the best way to address the root cause of her problems."

Dr. Damani performed a robotic repair of the paraesophageal hernia, using biodegradable mesh to reinforce the hiatal opening at the diaphragm and prevent postoperative recurrence. They then took down the existing Nissen fundoplication, which involves a complete 360-degree wrap of the stomach around the esophagus, and converted it to a Toupet fundoplication, a partial 270-degree wrap.

The Toupet method is often preferred for patients who have persistent dysphagia as well as reflux, as it does not completely encircle the esophagus. Thus it causes less postoperative side effects of dysphagia and gas bloat syndrome and allows the patient's natural gastric venting functions, such as belching and vomiting. In addition, it has been shown in studies objectively and subjectively to provide the same reflux control as a Nissen fundoplication.

The patient was extremely pleased with the successful outcome. "After less than 48 hours in the hospital, she was able to return home and eventually resume teaching," says Dr. Damani. "Thanks to the advanced expertise in esophageal testing and robotic surgery we have at NYU Langone, this patient was able to embark on a new course of treatment that significantly improved her quality of life." ■

> *"Thanks to the advanced expertise in esophageal testing and robotic surgery we have at NYU Langone, this patient was able to embark on a new course of treatment that significantly improved her quality of life."*
>
> **—Tanuja Damani, MD**

Feza Remzi, MD (Left), Shannon Chang, MD, MBA (Right)

Long Rectal Cuff May Be Preventable Risk Factor for Pouch Failure in Patients with IBD

Findings Stress Role of Surgeon Experience in Redo Surgery

POUCH REDO OUTCOMES ASSESSED BASED ON INITIAL TECHNIQUE

Proctocolectomy with ileal pouch-anal anastomosis (IPAA) is the treatment of choice for patients with inflammatory bowel disease, including ulcerative colitis and colonic Crohn's disease. The procedure leaves the anal sphincter intact and restores bowel continuity.

In recent years, minimally invasive laparoscopic surgical techniques have led to better cosmetic results, faster return to bowel function, and less pain and discomfort for patients following IPAA. However, between 3 percent and 15 percent of patients with IPAA eventually experience pouch failure and may require redo surgery.

Redo IPAA is an effective option for maintaining intestinal continuity and avoiding a permanent stoma. However, there is a lack of data comparing outcomes of transabdominal redo IPAA surgery following minimally invasive versus open techniques. In a recent study, published in the August 2020 issue of *Diseases of the Colon & Rectum*, researchers at NYU Langone sought to compare short- and long-term outcomes of redo surgery on the basis of which technique was used to create the original pouch.

"Our study revealed that a long rectal cuff is an important and potentially preventable risk factor for pouch failure following initial minimally invasive IPAA," says the study's senior author, Feza Remzi, MD, professor of surgery and director of the Inflammatory Bowel Disease Center at NYU Langone. "We also found that hand-sewn anastomoses are associated with increased risk of abscess formation, underscoring the importance of surgical expertise and experience in successful outcomes following redo IPAAs."

STUDY COMPARES OUTCOMES

For the study, investigators compared short- and long-term outcomes for 42 patients who underwent failed minimally invasive IPAA with a matched cohort of patients with failed open IPAA. Short-term morbidity and functional outcomes were similar between the two groups. A long rectal stump was more common after minimally invasive IPAA, while patients who had open procedures were more likely to develop abscess formation.

Leaving a short anal transitional zone (ATZ) of less than 2 cm is one of the fundamental steps in IPAA creation, regardless of the technique employed, says Dr. Remzi. However, deep rectal dissection is especially challenging with minimally invasive techniques and requires high levels of surgical dexterity and experience.

These technical challenges may explain why there was a shorter time to IPAA failure in the minimally invasive versus open IPAA group in the study, he notes.

However, redo IPAA is often less complex in patients with failed minimally invasive procedures because having a residual long rectum allows surgeons to perform stapled anastomoses, says study co-author Shannon Chang, MD, MBA, assistant professor of medicine and associate director of the Gastroenterology Fellowship Program at NYU Langone. Stapled anastomoses are often preferred because they are likely associated with higher pouch survival rates compared with hand-sewn IPAA, due to lower risk of pelvic sepsis, which is associated with pouch failure.

In the study, pelvic abscess formation was less prevalent after stapled redo IPAA, says Dr. Chang. Other larger studies have reported that stapled IPAA has better functional outcomes and carries less risk of incontinence and seepage compared with mucosectomy and hand-sewn anastomosis. Thus, although the number of patients who underwent stapled redo IPAA was higher in the minimally invasive group, outcomes after redo surgery were similar with both techniques.

POSTSURGERY CONSIDERATIONS

While both techniques can produce good outcomes, it is important to inform patients that they are likely to experience worse function following redo versus initial IPAA, says Dr. Remzi. Patients should expect five or six bowel movements per day and one or two per night, and a much improved quality of life. "Ninety-five percent of the patients were happy with the results of their surgery and felt the subsequent restrictions they might experience were acceptable in order to avoid a permanent stoma for life," he says. Patients in the study had high three-year estimated survival rates ranging from 81 percent (prior open surgery) to 95 percent (prior minimally invasive).

At NYU Langone, a national referral center for complex surgeries, surgeons routinely perform a three-stage procedure in patients who are eager to have it or are candidates for redo pouch surgery, starting with initial proximal diverting loop ileostomy for six months, followed by redo IPAA with temporary stoma, and stoma closure. The process helps to optimize the patient physically and psychologically and helps the pelvic sepsis to resolve before revision surgery.

"Our study is important in that it is the first to evaluate the impact of the technique used for IPAA creation on redo IPAA outcomes," says Dr. Remzi. "The single-surgeon, case-matched design of this study overcomes some of the limitations of past investigations that included multiple surgeons of various experience levels and patients with different characteristics." Having performed more redo pouch surgeries per year to repair complications from initial j-pouch surgery than any other team in the world, NYU Langone physicians attribute the program's success to a multidisciplinary team led by a highly experienced surgeon, access to a wide range of clinical trials, and a commitment to quality, safety, and patient-focused care.

NYU Langone Launches National IBD Course for First-Year Gastroenterology Fellows

NYU Langone's Lisa B. Malter, MD, and colleagues have launched a national introductory inflammatory bowel disease (IBD) course for first-year fellows. The course is offered as an annual one-day program, held in collaboration with the American College of Gastroenterology, in response to a growing need for gastroenterologists specially trained in IBD across the United States.

IBD 101: A Primer for First-Year Gastroenterology Fellows

COURSE OFFERS IBD PRIMER FOR FIRST-YEAR FELLOWS

IBD 101: A Primer for First-Year Gastroenterology Fellows, a daylong educational course that was held in person in September 2019 and virtually in September 2020, offers first-year fellows the opportunity to learn about the diagnosis and treatment of IBD in an intimate, interactive setting facilitated by national leaders in IBD clinical care, research, and education. The course features didactic roundtable sessions, case-based roundtable rotations, a career mentorship panel, clinical case simulations featuring standardized patients, and guidance on pursuing further education in IBD. The IBD 101 course is part of a broad effort to establish a national standardized IBD curriculum for gastroenterology fellows in order to ensure consistent, high-quality training in IBD-focused clinical management, research, and education, says Dr. Malter, associate professor of medicine and director of education at NYU Langone's IBD Center.

In addition to Dr. Malter, the course is co-directed by a distinguished group of IBD experts, including David P. Hudesman, MD, associate professor of medicine and co-director of the IBD Center at NYU Langone; Sunanda V. Kane, MD, MSPH, chair of quality, Division of Gastroenterology and Hepatology at the Mayo Clinic in Rochester, Minnesota; and David T. Rubin, MD, chief of the Section of Gastroenterology, Hepatology, and Nutrition at UChicago Medicine, in Chicago. The 2020 course featured more than 20 participating faculty from leading educational institutions across the country and enrolled its maximum capacity of 120 registrants, representing more than 70 participating fellowship programs.

The course is designed to provide a basic overview on the diagnosis, treatment, and management of IBD, says Dr. Hudesman. "IBD is a complex disease for which therapeutic options—such as anti-integrins, interleukin-12/23 inhibitors, and Janus kinase (JAK) inhibitors—are evolving rapidly," he says. "It's important to equip trainees with the most up-to-date clinical knowledge and management skills."

PLANS FOR 2021

The next IBD 101 course will be held virtually and is being planned for September 18, 2021. Registration will be offered on a first-come, first-served basis and will be open to 240 first-year gastroenterology fellows.

"Our course faculty offer not only IBD-specific clinical training, but also guidance on career pathways to consider as well as other educational opportunities in IBD," says Dr. Malter. "It is hoped that exposing participants to IBD early in their fellowship will allow them to make more informed career decisions and potentially consider pursuit of a subspecialty in IBD care."

Disclosures: David P. Hudesman, MD, has provided consulting services or served on advisory boards for BMS, Janssen, Takeda, Pfizer, and AbbVie; he also received a research grant from Pfizer. Lisa B. Malter, MD, has received medical education grants from AbbVie, Gilead, Janssen, Pfizer, UCB, and Takeda has and served on an advisory board for Gilead.

David P. Hudesman, MD

Lisa B. Malter, MD

> *"Our course faculty offer not only IBD-specific clinical training, but also guidance on career pathways to consider as well as other educational opportunities in IBD."*
>
> **—Lisa B. Malter, MD**

Multidisciplinary Teams Accelerate Progress in Pancreatic Disease

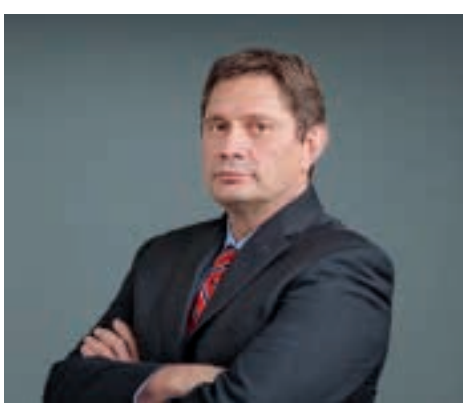
New Recruits Build on Existing Expertise

RENOWNED SURGEON TO HEAD NEW DIVISION OF HEPATOBILIARY AND PANCREATIC SURGERY

Christopher L. Wolfgang, MD, PhD, a renowned pancreatic surgeon and surgical oncologist, has been named director of the new Division of Hepatobiliary and Pancreatic Surgery in the Department of Surgery at NYU Langone Health. Dr. Wolfgang joins NYU Grossman School of Medicine as professor of surgery from The Johns Hopkins Hospital, where he most recently served as the John L. Cameron Professor of Surgery and Chief of Hepatobiliary and Pancreatic Surgery. The Division of Hepatobiliary and Pancreatic Surgery will offer world class care for patients with cancers and diseases of the bile duct, gallbladder, liver, and pancreas. Within the new division, liver and pancreatic surgeons will work closely with gastroenterologists, radiation oncologists, medical oncologists, and radiologists to determine the best course of treatment for each patient. The Division will also function in close collaboration with the Pancreatic Cancer Center, led by Diane M. Simeone, MD, the Laura and Isaac Perlmutter Professor of Surgery, at NYU Langone's Perlmutter Cancer Center, a National Cancer Institute–designated Comprehensive Cancer Center. His experience in treating the most complex surgical cases and research portfolio makes him the ideal candidate to take our team to the next level.
Dr. Wolfgang is among one of the most experienced pancreatic cancer surgeons in the world. He has performed over 1,200 whipple procedures, a complex surgery to remove part of the pancreas, small intestine, gallbladder and the bile duct. He has expertise in removing "unresectable" pancreatic cancers as well as having extensive experience in all aspects of pancreatic surgery including the robotic approach.
A prolific researcher, Dr. Wolfgang has several active NIH and foundation grants that support a translational research program concentrated on the understanding of pancreatic cancer spreads throughout the body. This is the number one reason for treatment failures, stage IV disease and the high lethality of this disease.

RESEARCHERS FIND NERVES KEEP PANCREATIC CANCER CELLS FROM STARVING

Pancreatic cancer cells avert starvation by signaling to nerves, which grow into dense tumors and secrete nutrients. This is the finding of a study with experiments in cancer cells, mice, and human tissue samples published online November 2020 in *Cell*. The study addresses pancreatic ductal adenocarcinoma (PDAC), the deadliest cancer of the pancreas with a 5-year survival rate below 10 percent. Led by researchers from NYU Grossman School of Medicine, the Department of Radiation Oncology at NYU Langone Health, and Perlmutter Cancer Center, the new study found that starving pancreatic cancer cells secrete a protein called nerve growth factor (NGF), which sends signals for extensions of nerve cells, instructing them to grow deeply into tumors. The researchers found further that such extensions, called axons, secrete serine, which rescues pancreatic cancer cells from starvation and restores their growth. "Our study offers more proof that pancreatic cancers are remarkable metabolic scavengers, which contributes to their deadliness," says corresponding author Alec Kimmelman, MD, PhD, the Anita Steckler and Joseph Steckler Chair of the Department of Radiation Oncology at NYU Langone. "The ability of nerves to funnel nutrients from the bloodstream to the more austere pancreatic tumor microenvironment is a fascinating adaptation, and could lead to therapeutic approaches that interfere with this unique flexibility." The new publication is one of many by Perlmutter Cancer Center researchers in recent years that describes the ways in which pancreatic cancer cells find energy.



Christopher L. Wolfgang, MD, PhD

Tamas A. Gonda, MD

DIVISION OF GASTROENTEROLOGY & HEPATOLOGY APPOINTS DIRECTOR OF PANCREATIC DISEASE PROGRAM

Tamas A. Gonda, MD, a nationally renowned advanced endoscopist and translational researcher in pancreatic disease, has joined NYU Langone Health as the director of the Pancreatic Disease Program within the Division of Gastroenterology and Hepatology—thanks in part to a generous contribution from Edward S. Pantzer. He has also been named chief of endoscopy at NYU Langone's Tisch Hospital.
Dr. Gonda will establish a comprehensive Pancreatic Disease Program within the Division of Gastroenterology and Hepatology at NYU Langone, serving both inpatients and outpatients who are facing diagnoses across the range of pancreatic disease, including acute pancreatitis, chronic pancreatitis, pancreatic insufficiency, pancreatic cysts, precancerous and high-risk pancreatic conditions, and pancreatic cancer. A prolific researcher and distinguished clinician, Dr. Gonda focuses on the study of the pathogenesis, diagnosis, and treatment of pancreatic diseases. He is an expert in the evaluation of biomarkers as potential precursors to pancreatic cancer and the epigenetics of pancreatic diseases. His research has been funded by the National Institutes of Health/National Institute of Diabetes and Digestive and Kidney Diseases, American Association for Cancer Research, and the American College of Gastroenterology.

EARLY DETECTION & PREVENTION INITIATIVE SEEKS TO INCREASE PANCREATIC CANCER SURVIVAL RATE OVER NEXT 10 YEARS

The Pancreatic Cancer Early Detection and Prevention Center, part of NYU Langone's Perlmutter Cancer Center, brings together clinicians, researchers, and patients with the goal of increasing the 5-year survival rate of pancreatic cancer to 50 percent within the next 10 years. Diane M. Simeone, MD, director of Perlmutter Cancer Center's Pancreatic Cancer Center, partnered with the American Society of Clinical Oncology to implement a new guideline that calls for all patients with pancreatic cancer to receive germline testing. "We are now learning that certain germline mutations are associated with much better therapeutic responses to certain types of drugs than others, so this information can be of direct benefit to our pancreatic cancer patients," says Dr. Simeone, who is the Laura and Isaac Perlmutter Professor of Surgery and professor of pathology. "We want to increase identification of family members who are at increased risk, so that they can be enrolled in early detection programs. Studies have found that screening in high-risk individuals increases the chance of detecting a resectable lesion from 15 to 90 percent. Under the direction of Dr. Simeone and her team, NYU Langone serves as the coordinating center for the newly formed PRECEDE (Pancreatic Cancer Early Detection) Consortium, a collaborative of 35 academic centers around the country and world focused on early detection in familial high-risk individuals.

To access these articles digitally, and for other news from NYU Langone, visit **https://nyulangone.org/news**

Referenced Publications

Aydinli HH, Esen E, Aytac E, Kirat HT, Schwartzberg DM, Chang S, Remzi FH. Transabdominal pouch salvage for failed minimally invasive versus open IPAA: A case match study. *Diseases of the Colon & Rectum*. 2020 Aug; 63(8):1102-1107.

COVID-19–related Publications

NYU Langone researchers have led many efforts to better understand the impact of COVID-19 across nearly every medical specialty, with 617 publications in 2020. Gastroenterology & GI Surgery contributed to this research with publications that included:

Axelrad JE, Malter L, Hong S, Chang S, Bosworth B, Hudesman D. From the American epicenter: Coronavirus disease 2019 in patients with inflammatory bowel disease in the New York City metropolitan area. *Inflammatory Bowel Diseases*. June 24, 2020.

Balzora S, Issaka RB, Anyane-Yeboa A, Gray DM, May FP. The impact of COVID-19 on colorectal cancer disparities and the way forward. *Gastrointestinal Endoscopy*. October 1, 2020; 92(4):946-50.

Gross SA, Robbins DH, Greenwald DA, Schnoll-Sussman FH, Pochapin MB. Preparation in the Big Apple: New York City, a new epicenter of the COVID-19 pandemic. *American Journal of Gastroenterology*. June 2020; 115(6):801-804.

Klein MJ, Frangos SG, Krowsoski L, Tandon M, Bukur M, Parikh M, Cohen SM, Carter J, Link RN, Uppal A, Pachter HL, Berry C. Acute care surgeons' response to the COVID-19 pandemic: Observations and strategies from the epicenter of the American crisis. *Annals of Surgery*. August 2020; 272(2):e66-e71.

Lee BT, Perumalswami PV, Im GY, Florman S, Schiano TD, Da BL, Mitchell R, Kilaru S. COVID-19 in liver transplant recipients: An initial experience from the US epicenter. *Gastroenterology*. September 2020; 159(3):1176-78.e2.

Mahadev S, Aroniadis OS, Barraza L, Agarunov E, Goodman AJ, Benias PC, Buscaglia JM, Gross SA, Kasmin FE, Cohen JJ, Carr-Locke DL, Greenwald DA, Mendelsohn RB, Sethi A, Gonda TA. Impact of the COVID-19 pandemic on endoscopy practice: Results of a cross-sectional survey from the New York metropolitan area [letter]. *Gastrointestinal Endoscopy*. September 2020; 92(3):788-89.

Rosen MH, Axelrad J, Hudesman D, Rubin DT, Chang S. Management of acute severe ulcerative colitis in a pregnant woman with COVID-19 infection: A case report and review of the literature. *Inflammatory Bowel Diseases*. June 18, 2020; 26(7):971-73.

Awards & Recognition

Jordan E. Axelrad, MD, MPH, has been awarded a K23 grant from the NIH/NIDDK to study the role of enteric infection in flares of IBD.

Sophie M. Balzora, MD, received the American College of Gastroenterology (ACG) President's Special Recognition Award, and has been appointed vice chair of the ACG Diversity, Equity, and Inclusion Committee.

Russell S. Berman, MD, was elected as the chair of the American Board of Surgery's Complex General Surgical Oncology Board. In this role, Dr. Berman oversees assessment and initial certification of surgical oncologists in training as well as continuous certification of surgical oncologists in practice. He continues to serve on the ABS Nominating and Assessment Committees, as well as the Video-Based Assessment Task Force. Dr. Berman is also currently in his third term on the Society of Surgical Oncology's Executive Council. He also currently serves in leadership roles on the SSO Education, Finance, Membership, and Nominating Committees.

Mitchell A. Bernstein, MD, served as Secretary-Treasurer of the New York Society of Colon and Rectal Surgeons.

Adam J. Goodman, MD, was named to the Executive Council, as chair of the Diversity and Engagement Committee, for the New York Society for Gastrointestinal Endoscopy.

Seth A. Gross, MD, is a member of the U.S. Multi-Society Task Force on Colorectal Cancer, and is chair of the International Affairs Committee for the American College of Gastroenterology.

Gregory B. Haber, MD, has been named the Gene & Lyn Overholt Endowed Lecturer, ASGE Crystal Awards, to be given at DDW 2021.

Abraham R. Khan, MD, is a member of the Chicago Classification 4.0 International Working Group, to define disorders of esophageal motility.

Rita M. Knotts, MD, MS, was named co-chair of the Membership Committee for the American Foregut Society.

Peter S. Liang, MD, MPH, serves as chair of the Trainee and Early Career Committee for the American Gastroenterological Association.

Calvin Q. Pan, MD, has been named vice chair ofthe Hepatitis B Special Interest Group for the American Association for the Study of Liver Diseases.

Mark B. Pochapin, MD, served as this year's president of the American College of Gastroenterology (ACG) and is a member of the ACG Board of Trustees. He received the ACG's Beacon Award for Outstanding Leadership in Extraordinary Times in October 2020.

Feza H. Remzi, MD, served as vice president of the New York Society of Colon and Rectal Surgeons.

Paresh Shah, MD, continues to serve on the SAGES Board of Governors; he also serves as Advocacy Committee co-chair for the American Foregut Society.

Diane M. Simeone, MD, was appointed as national PI for PRECEDE (Pancreatic Cancer Early Detection) Consortium.

Renee L. Williams, MD, MHPE, serves on the Board of Trustees for the American College of Gastroenterology.

ABOUT NYU LANGONE HEALTH

Leader in Quality

NYU Langone's emphasis on continuous improvement inspires teams to continually raise the bar on quality and safety across our growing network in Manhattan, Brooklyn, Queens, Long Island, Staten Island, and Florida. NYU Langone's Tisch Hospital, Kimmel Pavilion, NYU Langone Hospital—Brooklyn, and NYU Langone Hospital—Long Island were awarded an "A" as well as a Top Hospital award as part of the fall 2020 Leapfrog Hospital Safety Grades. NYU Langone Hospitals achieved Five Star ratings on CMS Hospital Compare effective October 2019 and is the only major academic medical center in the New York metropolitan region to attain a Five-Star Quality rating.

#9 in the Nation

#4 in the Nation

Ranked ninth by *U.S. News & World Report* for Best Hospitals; and ranked fourth for Best Medical Schools (Research).

Transforming Medical Education

As COVID-19 has added new urgency to nationwide physician shortages, debt burden, and lack of diversity, we remain committed to our accelerated pathways to the MD degree and full-tuition scholarships regardless of need or merit at the recently renamed NYU Grossman School of Medicine and the new primary-care focused NYU Long Island School of Medicine.

For more information about our physicians, services, and locations, visit **nyulangone.org**

Writer: Janet Colwell
Design: Ideas On Purpose
Printing: Allied Printing Services, Inc.

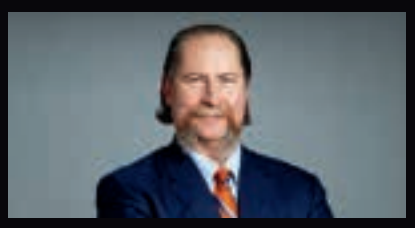
NYU Langone Health

NYU LANGONE HEALTH
550 First Avenue, New York, NY 10016
NYULANGONE.ORG

Gastroenterology & GI Surgery

2020 HIGHLIGHTS

NYU Langone Health



Renowned Transplant Surgeon Appointed Chair of Department of Surgery
See page 3.

Complex Case: Refractory GERD and Recurrent Paraesophageal Hernia Causing Esophageal Compression
See page 4.