Leadership

New York University

Martin Lipton, Esq
Chair, Board of Trustees

John Sexton
President

Robert Berne, PhD
Executive Vice President for Health

NYU Langone Medical Center

Kenneth G. Langone
Chairman, Board of Trustees

Robert I. Grossman, MD
The Saul J. Farber Dean and Chief Executive Officer

Steven R. Abramson, MD
Senior Vice President for Education, Faculty and Academic Affairs

Deha Bar-Sagi, PhD
Senior Vice President for Science, Chief Scientific Officer

Bernard A. Birnbaum, MD
Senior Vice President and Vice Dean, Chief of Hospital Operations

Andrew W. Brotman, MD
Senior Vice President and Vice Dean for Clinical Affairs and Strategy, Chief Clinical Officer

H. Leon Pachter, MD
The George David Stewart Professor of Surgery and Chair, Department of Surgery

Department of Surgery
550 First Avenue, NBV15N1
New York, NY 10016
212.263.6381
www.NYULMC.org/surgery

Transforming Surgery through Growth & Momentum

2012 Department of Surgery Report
Letter from the Chair
H. Leon Pachter, MD, FACS
The George David Stewart Professor of Surgery

The ethos of any great institution or department lies in its ability to adapt and transform. Great departments that dwell solely in the past inevitably forfeit the future. The underpinning of any department of surgery is its faculty. My mission is to ensure that we recruit new faculty to complement the already outstanding members of our team. In this regard, the faculty members that I have recruited, the majority of whom have been trained at other institutions—such as Columbia University, Texas Tech, Cleveland Clinic, UCSF and the Mayo Clinic, to mention only a few—offer us an exceptional opportunity to fortify ourselves for the inevitable change necessary to navigate the future. The newly recruited faculty will serve to solidify our position as a major academic surgical department by presenting us with different perspectives and infusing alternative approaches to surgical problems.

Academic institutions thrive in an environment of lively debate, including the exchange of provocative ideas and questioning of long-accepted precepts. The end result is the dissemination of novel and fresh ideas. Each of our new faculty members brings with him or her the unique component of being a “surgeon/scientist/clinical investigator.” I anticipate that they will have a profound effect on the way residents, students and their peers formulate surgical concepts, accept changing approaches, participate in research, and ultimately enable us to reengineer our thinking, present and future.

Although the link seems somewhat remote, there appears to be, at least on a theoretical basis, a solid connection between species adaptation and organizational change. That is the hypothesis being expounded by Cambridge Leadership Associates (CLA), who stress the concept of “adaptation” to overcome cognitive thresholds. Their framework of Adaptive Leadership™ revolves around analyzing which practices are core to the future and which are obstacles. In this regard, change and resistance to change are of paramount importance. It is also echoed in the mantra of excellence through “fast and strong” adaptation. This concept is not new, as it was the bedrock of Roman thinking when they ruled the world: “Qui non proficit, deficit,” or, “He who does not advance, falls behind.”

CLA also speculates that when any given species adapts, it gives up a small portion of its DNA. The DNA that is forfeited was responsible for hindering change, which was necessary for survival, and its jettisoning makes room for new adaptive DNA that can survive in an ever-changing environment.

The objective of the Department of Surgery is to be “first among equals.” To support this goal, the stereotypical perception of the surgeon as a “master technician” with no other qualifications needs to be replaced with an entirely new way for us to view surgical faculty. Our surgeons are the prototypes of what the new millenial surgeon should be. To be relevant in an academic setting, surgeons are the prototypes of what the new millennium will need to be comfortable in dealing with a gunshot wound to the liver, a ruptured abdominal aortic aneurysm, a laparoscopic colon resection, or a robotic splenectomy as they are in basic science research laboratories or translational clinical research. These are the core elements essential to construct the scaffolding necessary to achieve surgical greatness.

Since 2006, the Department of Surgery has recruited some of the country’s top talented, skilled surgeons, essentially doubling the size of the department to its current total of 65 full-time attending physicians. But the expansion is about much more than mere numbers; to be recognized as a top-flight surgical program requires excellence in many areas.

The 2012 Department of Surgery Report provides a glimpse of just a few of our recent accomplishments and introduces some of the newest members of our team.

Photo credits: John Abbott; New faculty headshots (except for page 15) pages 2, 3, 10, 11, 12, 13, 19, 22, 25; Joshua Bright; page 17; Gordon Cook; page 8; Tom Crane; page 24; NYU College of Dentistry; page 15 headshot; NYU Langone Department of Endocrinology images; page 12; NYU Langone Department of Radiology images; pages 14-15; NYU Langone Department of Surgery pages 1, 21; Anne Perez pages 5, 230; Vital Therapies, Inc. (VTI); page 18.

“NOW, HERE, YOU SEE, IT TAKES ALL THE RUNNING YOU CAN DO, TO KEEP IN THE SAME PLACE.
IF YOU WANT TO GET SOMEWHERE ELSE, YOU MUST RUN AT LEAST TWICE AS FAST AS THAT!”

Red Queen’s advice to Alice in Lewis Carroll’s Through the Looking Glass, H. Leon Pachter, MD, FACS, the George David Stewart Professor of Surgery and chair of the Department of Surgery, explains why.

(Source: News & Views, A Publication for the NYU Langone Medical Center Community March/April 2011)
<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Care Surgery</td>
</tr>
<tr>
<td>Bariatric Surgery</td>
</tr>
<tr>
<td>Bellevue Hospital Center</td>
</tr>
<tr>
<td>Breast Surgical Oncology</td>
</tr>
<tr>
<td>Colon and Rectal Surgery</td>
</tr>
<tr>
<td>Endocrine Surgery</td>
</tr>
<tr>
<td>Gastrointestinal Oncology</td>
</tr>
<tr>
<td>General Surgery/Surgical Oncology</td>
</tr>
<tr>
<td>Oral and Maxillofacial Surgery</td>
</tr>
</tbody>
</table>
Acute Care Surgery

Intensive Juggling Around the Clock

No one ever thinks of trauma surgeons as jugglers. Perhaps that is because they are so adept at being able to balance teaching the next generation of surgeons, providing safe, cutting-edge care to the patient, and maintaining continuity of care. The Division of Acute Care Surgery has addressed these issues over the past three years. Part of the solution was simple: increase attending presence in the hospital as well as in all aspects of patient care.

The first place this presence was most needed was in caring for the many injured patients brought to the Bellevue Emergency Department. Patients would no longer have to wait for the experienced mind and hand of an attending to come in to the hospital; now, an attending is present 24/7. As an injured person is rolled into the Emergency Department, they are not just greeted by a chief resident but by a chief resident whose actions are watched and guided by an attending. Our attendings are expert at juggling patient safety with the need to train residents to think and make judgments; this requires a carefully selected group of attendings. To accomplish this increased presence, the Division of Acute Care Surgery has increased from three to five surgeons over the last three years. But the revolution did not stop here, as the need for around-the-clock expertise extended beyond the gates of Bellevue. The Surgical ICU at Tisch Hospital had different priorities to be juggled, so our group further diversified to meet these needs. Two medical intensivists joined our program because of their additional interest and expertise in surgical critical care. Their perspectives into the treatment of surgical patients added new dimensions to both the care of patients and the teaching of our residents.

The final piece of the surgical critical care puzzle at Tisch was the engagement of two anesthesia-trained intensivists already caring for our postoperative cardiac patients. Twenty-four hours a day, seven days a week, this multispecialty intensivist group now staffs the Tisch Surgical ICU and the postoperative Cardiac ICUs. The NYU Langone Medical Center now has the only Surgical ICUs in New York City to have around-the-clock intensivists specialized in surgical critical care. The Department of Surgery works collaboratively with the Department of Anesthesia to cover SICU.

The Division of Acute Care Surgery is proud to lead New York City in the care of the acutely injured and ill. We have the largest group of fellowship-trained acute care surgeons in the region caring for patients with surgical emergencies at Bellevue, and the highest level of surgical critical care expertise around the clock in the Tisch Hospital surgical and cardiovascular ICUs.

As expert jugglers, our attendings provide the highest level of patient care while maintaining an outstanding program for the training of the surgeons of tomorrow.

SPOTLIGHT ON NEW FACULTY

Rafidah H. Said, MD
Assistant Professor
St. Barnabas Medical Center (Internal Medicine), Internship and Residency Training
The Mount Sinai Hospital (Critical Care Medicine), Clinical Fellowships
Most Recent Faculty Position: Assistant Professor of Medicine and Neurology, Albert Einstein College of Medicine, Montefiore Medical Center

“Writing a check for an annual salary is not the same as spending it. Every dollar that is spent on education and training is invested in the future. As an academic program, we have to create the conditions that allow us to maximize this investment.”

Luciano B. Lamos-Filho, MD
Assistant Professor
NYU Langone Medical Center (Internal Medicine), Internship and Residency Training
Mount Sinai Medical Center (Infectious Disease), Clinical Fellowships
The Mount Sinai Hospital (Critical Care), Clinical Fellowships
Montefiore Medical Center (Critical Care), Clinical Fellowships
Most Recent Faculty Position: Assistant Professor of Medicine, Albert Einstein College of Medicine, Montefiore Medical Center

“I have always been interested in trauma and emergency surgery as I always have been, but my greatest research interests lie in international health, capacity-building and the delivery of surgical and basic anesthesia and critical care service in the developing world.”

S. Rob Todd, MD, FACS
Assistant Professor
Director, Emergency Surgery, Bellevue Hospital Center

Texas Tech University (Surgery), Internship and Residency Training
Duke Health & Science University (Trauma and Surgical Critical Care), Clinical Fellowships
Most Recent Faculty Position: Assistant Professor of Surgery, Weill Cornell Medical College, The Methodist Hospital

“I chose to come to NYU Langone Medical Center (and specifically Bellevue Hospital Center) because of its rich history and the vast clinical and research opportunities that exist here. Throughout my surgical career, I have had the honor of working with many surgical greats. Now that I am here, I look forward to working with the many more surgical greats—past, present and future.”

Chad T. Wilson, MD, MPH
Assistant Professor
Massachusetts General Hospital (Surgery), Internship and Residency Training
Most Recent Faculty Position: Assistant Professor of Surgery, Weill Cornell Medical College, The Methodist Hospital

“After residency, I spent a year doing general surgery in a 200-bed hospital in rural East Africa. I have always been interested in medical mission work. I remain interested in trauma and emergency surgery as I have always been, but my greatest research interests lie in international health, capacity-building and the delivery of surgical and basic anesthesia and critical care service in the developing world.”
In individuals for whom standard approaches of diet and exercise simply do not work in the long term, bariatric surgery may be the only lasting solution in the battle against obesity. The physicians of our expert team, many of whom completed bariatric and minimally invasive fellowships prior to the field’s explosive growth, have a wealth of experience. Continuing the momentum, we are currently training the next generation of residents, exposing them to advanced surgical techniques and showing them the benefits that patients accrue as they maintain their weight loss.

Our surgical residents have authored two sentinel publications that describe some of the longest-term U.S. data available on outcomes and complications associated with adjustable gastric bandings (Surgical Endoscopy, Feb. 2010 and Aug. 2011).

Recognizing the individual needs of our patients, we transformed our program in 2009 by combining medical and surgical weight loss options under one roof. This next generation of experts will fulfill a real need in the community by improving patient access, further contributing to the field of bariatric surgery.

At Bellevue Hospital Center, a multidisciplinary bariatric surgery program was created to fulfill the needs of underserved minorities with significant lack of access to proper therapies for obesity. Now, a comprehensive obesity center has been created that offers multimodal therapies for obesity ranging from laparoscopic bariatric surgery to intensive medical weight management, psychology, nutrition and, in the future, post-bariatric body contouring.

**Spotlight on New faculty**

**Holly F. Lofton, MD**  
Assistant Professor  
Bariatrician  
Medical College of Georgia (Internal Medicine), Internship  
Lenox Hill Hospital (Internal Medicine), Residency Training  
Geisinger Medical Center (Obesity Medicine/Nutrition), Clinical Fellowships  
Most Recent Faculty Position: Staff Physician, Center for Nutrition and Weight Management, Geisinger Medical Center  
“I am currently involved in developing research into the investigation of changes in metabolic rates during and after weight loss. With a team of colleagues focused on the whole person, I am privileged to add my nonsurgical perspective to the overall treatment planning mix.”

**Bradley F. Schwack, MD, FACS**  
Assistant Professor  
NYU Langone Medical Center (Surgery), Internship and Residency Training  
Norton Healthcare (Laparoscopic Surgery), Clinical Fellowships  
“Being part of the team at NYU Langone has broadened my life as well as my professional career. It is here that my mentors and idols became my colleagues.”

NYU Langone is recognized as a bariatric surgery center of excellence by the American Society for Metabolic and Bariatric Surgery (ASMBS).
The surgeons from NYU Langone Medical Center’s Department of Surgery provide all of the surgical care at Bellevue Hospital Center. Bellevue Hospital Center, the flagship hospital for the New York City Health and Hospitals Corporation system (HHCH), provides multidisciplinary, integrated ambulatory and inpatient surgical care to an ethnically diverse, traditionally underserved population. As a referral hospital, Bellevue does not have the traditional catchment areas that define the patient base for most hospitals in the HHC system. Significant changes are under way with health reform law in which efficient patient care and patient satisfaction are going to govern reimbursements to hospitals. As an academic medical center, NYU Langone is working with Bellevue administration to provide world-class care, especially to underserved populations most in need.

The Department of Surgery at Bellevue has recognized that it is not sufficient simply to offer surgical services, be they elementary or complex; the study of disease and procedure-specific outcomes data is integral to the success of any medical endeavor. These insights will provide the basis for self-assessment and the foundation upon which to build, implement and test quality improvement programs.

Toward this end, the Department of Surgery at Bellevue has developed a computerized Quality Improvement Dashboard for tracking complications and benchmarking procedure-specific outcomes data against published national standards, such as the Surgical Care Improvement Project and the University HealthSystem Consortium outcomes data. This Dashboard will be a valuable tool to visually examine summary data in order to make effective and efficient decisions about the quality of care we provide to our patients. The data will be published on a quarterly and/or monthly basis.

**SPOTLIGHT ON NEW FACULTY**

**Akuszynski O. Udo-Williams, MD, FACS**
Assistant Professor
NewYork-Presbyterian Hospital/Columbia University Medical Center, Internship and Residency Training
NewYork-Presbyterian Hospital/Columbia University Medical Center, Renal Transplant Fellowship
NewYork-Presbyterian Hospital/Columbia University Medical Center, Advanced Laparoscopy Fellowship
Most Recent Faculty Position:
Assistant Professor of Surgery, Columbia University

“Working at Bellevue is an opportunity to truly treat New York. The added nuances: socioeconomic, variety and cultural background often provide a fascinating layer of complexity to the management of surgical problems.”

**Prashant Sinha, MD, FACS**
Assistant Professor
NewYork-Presbyterian Hospital/Columbia University Medical Center (General Surgery), Internship and Residency Training
Most Recent Faculty Position:
Attending, St. Anthony Community Hospital

“Through a cross-functional collaboration focused on performance, safety and expense reduction, I am learning how to tackle complex challenges requiring solutions that serve both departmental needs and those of our individual patients. These insights are also helping to shape my research on the primary and secondary prevention of incisional hernias.”
Long-recognized for clinical excellence, the Breast Surgery Section has become increasingly involved in research activities to further our understanding of breast disease. A major initiative in the past several years has been the establishment of longitudinal registries to accumulate information regarding the patients we treat for breast cancer as well as those at increased risk for the disease. These longitudinal data registries include information about patients’ family history of breast cancer, genetic status, the use of various strategies to reduce the risk for breast cancer, and other characteristics.

The Breast Cancer Database also includes detailed information about the characteristics of the cancer and the treatment of the disease. By accumulating this information and tracking patients over time, we will enable sophisticated research into the breast cancer-related outcomes of our patients. We have also developed a strong relationship with our colleagues in the BioRepository Center. A rapid acquisition process, combining their expertise and technology with the enthusiastic cooperation of not only our breast surgeons but surgeons in other areas as well, has produced a bank of tumor specimens that can be linked to clinical information, forming a powerful resource for basic science research.

**Breast Surgical Oncology**

We’re Identifying Populations at Risk
Colon and Rectal Surgery
We’re Marshalling New Resources to Better Manage Colorectal Disease

Recognizing and addressing a known gap in our portfolio of services, we are pleased to announce the creation of a new Division of Colon and Rectal Surgery. Leveraging the experience of our newly recruited division chief, Mitchell A. Bernstein, MD, we also established a state-of-the-art Anorectal Physiology Laboratory to expand the Medical Center’s ability to treat patients with conditions such as fecal incontinence, constipation and rectal prolapse.

Endocrine Surgery
Thyroid Cancer Tissue and Data Bank

The incidence of thyroid cancer in the United States is increasing more rapidly than any other cancer—almost 7% each year. In 2011, 48,000 Americans were diagnosed with thyroid cancer. Each year more than 200 patients with thyroid cancer undergo surgery by members of the Division of Endocrine Surgery at NYU Langone. Thyroid cancer is highly curable. Many patients can be treated with surgery alone or with surgery followed by one radioactive iodine treatment. Chemotherapy is almost never required. In the future we may learn that some small thyroid cancers may not require treatment at all. Conversely, a very small number of patients with thyroid cancer prove to have very aggressive tumors that can be fatal in spite of our best current treatments. Trying to develop techniques to predict how each thyroid cancer will behave and to individualize each patient’s treatment is one of the goals of the division.

Every patient who undergoes thyroid surgery by a member of our division is asked to participate in our research program by granting permission to keep information about them, their cancers, and their treatment outcome in an IRB-approved database. Most importantly, each patient is asked for permission to cryopreserve a piece of his or her cancer to be used for future research, and virtually all of our patients agree to do so. So far, more than 500 thyroid cancer samples have been deposited in the tissue bank. Because of the care with which they are collected and processed, both DNA and RNA can be extracted from them and studied. We have also recently discovered a novel cellular subset of gamma delta T cells that express these receptors and have significant pro-tumor potential in mouse pancreatic cancer models. This work in mice is being correlated to human pancreatic cancer specimens using tissue obtained from patients having pancreas surgery at NYU Langone.

Our research in metastatic liver tumors addresses the basic question of why gastrointestinal cancer most commonly deposits in the liver. We have examined the role of myeloid-derived suppressor cells, which we discovered proliferate in the liver of tumor-bearing hosts and induce localized immune suppression; we believe this creates a microenvironment rife for the deposition of hepatic metastases. Further eradication of this population has significant potential to enhance the endogenous antitumor immune response in the liver.

Gastrointestinal (GI) Oncology
Developing Novel Approaches to Outwit Gastrointestinal Cancers

Translational and basic science research have expanded significantly in the section of GI Oncology over the past three years, including a focus on gaining insight into the immune regulators of gastrointestinal malignancies such as pancreatic cancer and metastatic liver cancer.

In pancreatic cancer, much of our work has revolved around investigating the cellular and biochemical mediators of peri-tumoral inflammation and its mechanism of feedback to drive neoplastic transformation in pancreatic ductal epithelial cells. We have focused on the role of pattern recognition receptors, which we discovered are upregulated on innate immune cells in the tumor microenvironment in pancreatic cancer, and whose binding triggers well-recognized (as well as novel) pro-inflammatory and mutagenic signaling mechanisms. We have also recently discovered a novel cellular subset of gamma delta T cells that express these receptors and have significant pro-tumor potential in mouse pancreatic cancer models. This work in mice is being correlated to human pancreatic cancer specimens using tissue obtained from patients having pancreas surgery at NYU Langone.
The Division of Surgical Oncology has introduced a new Regional Cancer Therapy Program, providing a significantly increased range of therapeutic options for a group of advanced cancer patients who previously have had few available treatments. The first program implemented under the Regional Cancer Therapy Program has been the Peritoneal Surface Malignancy Program. Started at the beginning of the 2011-2012 academic year, nearly 20 patients with peritoneal (lining of the abdominal cavity and the outer covering of its organs) spread of cancer from mucinous appendiceal neoplasms, colorectal cancer and peritoneal mesothelioma have been treated by our surgical oncologists with tumor debulking (cytoreduction) plus hyperthermic intraperitoneal chemotherapy (HIPEC) treatment. Other tumors frequently associated with peritoneal spread, also known as carcinomatosis, include pseudomyxoma peritonei, ovarian cancer and gastric cancer. This surgical procedure combines removing all peritoneal surface disease, followed immediately by bathing the abdominal cavity and its contents with heated chemotherapy. Similarly, we are poised to introduce a new procedure for patients with regionally advanced melanoma. Although a procedure known as limb perfusion has been available for years to help treat this advanced, debilitating form of metastatic melanoma, it is an extremely costly, lengthy and morbid operation, reserved for young, healthy patients. We will soon introduce isolated limb infusion, a minimally invasive alternative to limb perfusion that uses percutaneously placed catheters to perform a shortened, lower-risk version of the regional therapy. Providing similar outcomes to the older perfusion procedures, infusions are tolerated by most patients and may be repeated if necessary. Much like the Peritoneal Surface Malignancy Program, this program provides tremendous opportunity for translational research in a multidisciplinary fashion.

After several years of multidisciplinary research and translational application of virtual treatment planning for complex maxillofacial reconstruction, our team revolutionized the process for head and neck tumor surgery using computer-aided imaging to plan the entire procedure in advance. Recognizing the potential for such imaging in maxillofacial surgery, we began working with both a software company and a manufacturer that, together, created blueprints and stereolithographic models, enabling surgeries on both the jaw and the harvesting site for reconstruction to be planned precisely in advance. This allows surgical teams to operate simultaneously, reducing the length and morbidity of surgery. The team also studied whether dental implants (titanium cylinders that are drilled into bone) could be surgically placed with the needed precision at the same time as the transfer of bone; this eliminated the need for a second surgery to restore dental function.
NYU LANGONE MEDICAL CENTER’S PEDIATRIC SURGICAL GROUP WILL PROVIDE SURGICAL CARE AT HACKENSACK UNIVERSITY MEDICAL CENTER

The Division of Pediatric Surgery, part of the Hassenfeld Pediatric Center, has provided comprehensive, exceptional surgical care to the pediatric community at NYU Langone Medical Center for three decades. Clinical outcomes have achieved a degree of excellence across the entire spectrum of pediatric surgical disease. It is now time to focus on expansion: bringing new faces with particular expertise to the Medical Center and expanding our footprint to encompass other institutions.

In anticipation of the construction and opening of our new Hassenfeld Pediatric Center in several years, we are developing the means to populate that institution with pediatric surgeons and a support staff of world-class stature.

Over the course of the last three years, four new pediatric surgeons have been added to the division, bringing the total to five. These new faces have added expertise to many facets of our clinical pediatric surgical capabilities. The particular areas of interest provided by these new additions include complex abdominal and thoracic surgical problems, minimally invasive surgery and inflammatory bowel disease (e.g., Crohn’s disease and ulcerative colitis).

We have recently established an agreement with The Joseph M. Sanzari Children’s Hospital at Hackensack University Medical Center. Our pediatric surgical group will provide the pediatric surgical care for this New Jersey institution, which is a wonderful children’s facility replete with a full complement of pediatric subspecialists. This new relationship provides us with additional clinical experience and expands the influence and reputation of NYU Langone Medical Center beyond its present borders.

SPOTLIGHT ON NEW FACULTY

Arnold G. Coran, MD, FACS
Professor
Brigham and Women’s Hospital (General Surgery), Internship and Residency Training
Boston Children’s Hospital, Pediatric Surgery Fellowship
Most Recent Faculty Position: Surgeon-In-Chief and Chief of Pediatric Surgery at C.S. Mott Children’s Hospital, University of Michigan

“I am privileged to have met so many of my colleagues around the country as past president of the American Pediatric Surgical Association and in my role as a governor of the American College of Surgeons. When not present at the Medical Center, I travel the world assisting other pediatric surgeons in extremely difficult cases and serving as editor-in-chief of what is now the 7th edition of Pediatric Surgery.”

Jason C. Fisher, MD, FACS
Assistant Professor
New York Presbyterian/Columbia University Medical Center (Pediatric Surgery), Clinical Fellowships
Cincinnati Children’s Hospital Medical Center (Pediatric Surgery), Clinical Fellowships

“The division continues to evolve at a remarkable pace. While leveraging my strong passion for computational biology and health informatics, I look forward to helping create a multidisciplinary center for colorectal disorders in children, where we can provide comprehensive care for disorders such as Hirschsprung’s disease, inflammatory bowel disease and anorectal malformations.”

Pediatric Surgery
The Growth Years
Transplant Surgery
Filtering Our Options to Address Liver Failure

Presently, there are few treatment options for patients with acute chronic liver failure. Although they are usually ineligible for transplant, patients with limited cirrhosis may be able to recover and regenerate a normal liver if they can survive the acute episode. The Extracorporeal Liver Assist Device (ELAD®) is the first bioartificial liver support system. It is designed to temporarily replace the function of the liver to allow time for native liver cells to regenerate or provide a bridge to transplantation. The device is composed of a dialysis-type pump system and several “metabolically active” cartridges containing human liver cells, each containing thousands of hollow fiber capillaries through which the patient’s plasma is circulated for up to five days. In terms of research, we were the lead center in a recently completed study that was presented internationally: A Phase 2b Study of Safety & Efficacy in Subjects with Acute-on-Chronic Hepatitis (AOCH) Due Either to Acute Alcoholic Hepatitis or Acute Decompensation of Cirrhosis & the Use of a Support System (ELAD®), a Human Cell-Based Liver. Because of the success of this trial, a new Phase 3 trial is currently being planned focusing on the safety and efficacy of ELAD in subjects with acute alcoholic hepatitis.

Vascular Surgery
Our Hybrid OR Provides a “Suite” Spot for Creating Custom Stent Grafts Using Virtual On-Table 3-D Imaging

The evolution of vascular surgery has been fast-paced since the early 1990s, when the first endovascular stent was used to repair an abdominal aortic aneurysm (AAA). Much like the inner tube of a bicycle tire, a stent is now introduced from within the aorta, excluding the AAA by sealing in normal aorta above and below the aneurysm. Remarkably, what previously required extensive surgery could now be accomplished via small incisions in each groin and a single hospital night’s stay. Unfortunately, not all patients with aortic aneurysms can be treated with endovascular stents; an aneurysm that extends to or involves the renal arteries supplying flow to the kidneys must still be repaired using traditional open surgery. In order to seal the graft in place and still be able to preserve blood flow to the kidneys, we have helped develop custom stent grafts with fenestrations or “holes” burnt in the fabric of the graft corresponding to the renal orifices. In this fashion, patients with otherwise inadequate infrarenal seal zones can now be treated with this procedure, known as endovascular aneurysm repair (EVAR).

The Division of Vascular Surgery at NYU Langone Medical Center has been among the pioneers in the advancement of EVAR technology from the very beginning. We were part of the original trial in the United States in the early 1990s, and have contributed to each subsequent clinical trial for abdominal and thoracic aortic stent grafts. Our division is proud to be considered a center of excellence for advanced aortic disease, regionally, nationally and internationally. We look forward to the next phase of endovascular therapy for aortic disease and are currently helping explore the possibility of branched and fenestrated stent graft design to treat thoracic aortic aneurysms involving the great vessels off the aorta in the chest.
The Surgery Service at the Veterans Affairs New York Harbor Healthcare System’s New York campus is at the forefront of delivering effective, sophisticated care for both complex and common surgical disease, fulfilling its mission of clinical care, education and research. The VA environment is an ideal one for student and resident development, facilitating optimal clinical growth and progressive independence under appropriate supervision. The service has been recognized for ongoing excellence by the VA Surgical Quality Improvement Program (VASQIP), and the Surgery Service is organized in a way that facilitates collaboration and cross-disciplinary management.

General and Vascular Surgery are the sections that fall under the Department of Surgery at the NYU School of Medicine. Within General Surgery, staff surgeons and consultants provide a full range of care. Notable developments include a full range of endocrine surgery and proctology to complement existing expertise in surgical oncology, colorectal, hepatobiliary surgery and gastric surgery. A close working relationship with general thoracic surgery facilitates esophageal surgery.

Surgical Oncology has developed an extensive collaboration with Medical and Radiation Oncology across our campus. The multidisciplinary tumor board, under surgical leadership, assures that all patients receive optimum care for their cancers. New York is the only VA in the region offering HIPEC to patients who would benefit from this specialized treatment. On the research front, our team has been focusing on the efficacy of intraperitoneal chemotherapy for gastric cancer, as well as on the use of clinical, biochemical and biologic markers for prognostication of short- and long-term outcomes in hepatic, pancreatic and gastrointestinal cancer. They are also working on prediction of perioperative outcomes and improvement in postoperative triage for patients undergoing general surgery procedures. As a key referral center for the veterans in the tristate area seeking minimally invasive treatment of hepatocellular carcinoma, cancers of the GI tract and peritoneal malignancies, researchers continue to evaluate the effects on quality of care and oncologic outcomes of cancer collaborative teams in the treatment of veterans with hepatocellular carcinoma.

Vascular Surgery provides up-to-date care for all aspects of vascular disease, including endovascular surgery, and is a major site for vascular surgery education. The New York campus was part of the initial trial of endovascular aortic aneurysm repair, and is a regional referral center for vascular disease. Notable are the success rates for limb salvage and vascular access for end-stage renal disease (ESRD), for which we are in the top rank of VA medical centers nationally.
In his essay “The Soul of a Surgeon” Richard Selzer, MD, a surgeon and author, writes, “[…] surgery is a craft that can be mastered with persistence and devotion […]. What cannot be easily mastered, and what requires the long and arduous novitiate, is the art of surgery, of which the comportment of the surgeon is a vital component.”

NYU Langone Medical Center stands in the vanguard of surgical education, focusing as much on the art of surgery as the craft. Since becoming chair of the Department of Surgery in 2006, H. Leon Pachter, MD, the George David Stewart Professor of Surgery, has made modernizing surgical education a top priority, and has begun to implement some progressive reforms. “In the past,” he explains, “surgeons were viewed as cut-on-the-dotted-line technicians. I want tomorrow’s surgeon to be ‘the complete surgeon’—somebody who can diagnose the disease, manage the disease, operate on the disease, and then take care of the patient afterward.”

It’s a tall order, but Dr. Pachter is confident that our medical students and residents will rise to the challenge. This year, 48 out of the 166 graduating medical students requested surgical advisors for the residency application process. NYU School of Medicine’s surgical residency program is one of the School’s most competitive, accepting only nine out of 1,200 applicants per year. To ensure that apprentices train at the highest level, Dr. Pachter has recruited 35 distinguished surgeons in the past six years, many of them nationally or internationally renowned. In the process, the Department of Surgery has become one of NYU Langone’s most diverse faculty groups.

These days, surgery often occurs in an outpatient setting or is followed by only a brief hospital stay, making it all but impossible for students and residents to observe the full continuum of surgical care. “This makes educating our medical students and surgical residents more challenging,” says Mark Hochberg, MD, professor of surgery and vice chair of surgery for education, “so we have become more innovative in surgical education, especially as it relates to doctor-patient communication.”

The Professionalism Curriculum, developed by Dr. Pachter and Dr. Hochberg, is aimed at teaching “the art of surgery.” After the curriculum was recently presented at a national medical meeting, over 60 surgical training programs requested materials on the Surgical Professionalism and Interpersonal Communication Education (SPICE) program. “This makes our Department of Surgery a national leader in doctor-patient communication,” explains Dr. Hochberg. “What we’ve developed at NYU Langone will help shape ‘the complete surgeon’ at over half of the medical schools in this country.”

NYU Langone’s ambitious agenda takes advantage of the ways in which technologically savvy students learn. A recent study in the Archives of Surgery found a strong correlation between a surgeon’s skills at laparoscopic techniques and video games. The American College of Surgeons recently accredited the Surgical Skills Lab as an accredited Education Institute, and the lab puts dexterity to the test, providing no-risk practice in knot-tying, suturing, airway techniques, and other skills. Its state-of-the-art mannequin-
Surgical Education

continued

in-residence, SimMan, helps students train for emergency scenarios that demand split-second decision making. General Surgical Residency Program Director Russell S. Berman, MD, concurs and has made simulation training in NYU Langone’s state-of-the-art laboratory a key part of residency education. The New York Simulation Center for the Health Sciences (NYSIM), created through a partnership of The City University of New York and NYU Langone Medical Center, is one of the nation’s largest urban health science simulation training facilities.

It is not surprising that this year’s surgical residency accreditation review by the Residency Review Committee of the Accreditation Council for Graduate Medical Education (ACGME) rewarded our residency with full five-year accreditation (the maximum allowable). In fact, its final report states that many of Dr. Pachter’s and Dr. Berman’s innovations are “national best practices.”

In collaboration with the American College of Surgeons and the Association for Surgical Education, NYU Langone has also developed a nationally recognized Web Initiative for Surgical Education (WISE-MD), an effort led by Mary Ann Hopkins, MD, associate professor of surgery. This unique program, now licensed by more than 50 medical schools internationally for use in their surgical training programs. It employs a split screen that shows the actual surgery side by side with a 3-D animated version.

“We’re also trying to imbue our students and residents with a humanistic approach to surgery and medicine,” explains Dr. Pachter. “When I was a medical student, no one ever taught me how to deliver bad news, how to cut across language barriers, how to deal with ethical issues, how to admit that you’ve made a mistake, how to take care of yourself and present yourself.”

The Department of Surgery continues to support the use of simulated patient encounters so that surgeons-in-training can develop their professional skills. “In the past, the pressure to become a masterful technical surgeon caused surgical residents to focus more on technique than interpersonal skills,” explains Dr. Hochberg. “Surgeons are typically introduced to patients at a critical moment, and they can fail as doctors if they don’t communicate well. Our goal is to make a technically gifted surgeon equally adept at doctor-patient communication.”

Adds Dr. Pachter, “If you lose the heart of medicine, you’ve lost it all. We are committed to training our medical students to become critical thinkers, technically superb surgeons and outstanding doctor-patient communicators.”

Surgical education for NYU School of Medicine medical students, residents and faculty has continued to expand at every level.

Extracted from: “To Fashion ‘the Complete Surgeon,’ NYU School of Medicine Is Pulling Out All the Stops.”
(News & Views, May/June 2010)
Acute Care Surgery


Endoexcision Surgery

“Unusual presentation of patients with nesidioblastosis in a hospital-based teaching hospital.” Lim J, Hochmann T, Blumberg SN, Patel KN, Keller HS, Ogilvie JH. Thyroid 2013;23(7):672-675.


“Surgical Oncology


Selected Publications (2010-2012)

We transform surgery and patient care, not just by what we do but by sharing our findings with others. Listed below are just a few examples of some of our most important publications chosen from over 480 papers published by members of the Department of Surgery during the past three years.


January 2012-August 2012

Grants

Patrick J. Lamparello, MD, FACS
Marina S. Kurian, MD, FACS
Kathie-Ann Joseph, MD, FACS
Mark Hochberg, MD, FACS
Spiros G. Frangos, MD, FACS
Shubhada Dhage, MD, FACS
Deborah M. Axelrod, MD

Vascular Fellowship Support
Abbott Fund

Workshops
Postoperative Patient Education Eating Workshops

Allergan
Postoperative Patient Education Eating Workshops

George Miller, MD, FACS
American Liver Foundation
Dendritic Cell Activation During Liver Injury of Their Contribution to Hepatic Cirrhosis

Department of Defense
Dendritic Cells Link Chronic Pancreatitis to Pancreatic Cancer

The Irma T. Hirschi Charitable Trust
Lustgarten Foundation
Role of the Intestinal Microbiome in Promoting Pancreatic Carcinogenesis

NIH R03
Effect of Dendritic Cell Lipid Content on Hepatic Inflammation and NASH Pathogenesis

NIH R21
Role of Dendritic Cells in Pancreatic Tumorogenesis

NIH K08
Role of Dendritic Cells in the Pathogenesis of Hepatic Fibrosis

National Pancreas Foundation
The Role of Toll-Like Receptors in Modulating Pancreatic Tumorogenesis

Society of University Surgeons
Role of Hepatic Myeloid Derived Suppressor Cells in Enabling Liver Metastases from GI Cancers

New York University Whitehead Fellowship
Role of Rhesus Hepatic Myeloid Derived Suppressor Cells in Enabling Hepatic Metastases from Gastrointestinal Cancers

Firas F. Mussa, MD, FACS
Fridolin Charitable Trust
Patient-Centered Outcomes Research in Diabetics with Critical Limb Ischemia

NIH K12
Comparative Effectiveness of Endovascular Intervention in Treatment of Diabetic Foot Ulcers

Society for Vascular Surgery
Patient-Centered Outcomes for Endovascular Interventions in Critical Limb Ischemia

Manish S. Parikh, MD, FACS
NIH K12
Comparative Effectiveness of Bariatric Surgery vs. Medical Management to Induce Diabetes Remission in Patients with BMI 30-40

NYS DOH ECRIP
Effects of Weight Loss on Cardio-Respiratory Function and Patient-Centered Outcomes in an Underserved, Minority Population with Clinically Severe Obesity

Society of American Gastrointestinal and Endoscopic Surgeons (SAGES)
Does a Preoperatively Medically Supervised Weight Loss Program Improve Bariatric Surgery?

Kepal N. Patel, MD, FACS
American Thyroid Association and THANC (Thyroid Head & Neck Cancer Foundation)
MUC1 Mediates Invasion and Augments the Malignant Phenotype of Thyroid Carcinoma

Brian Lee Schmidt, MD, PhD, DDS and Markus Hardt, PhD
NIH R01
The Role of Proteases and Peptides in Cancer Pain

NIH R21
A Novel Gnawing Assay to Quantify Nociception in Models of Chronic Orofacial Pain

NIH R01
Predictive Markers for Oral Cancer Metastasis

Oral and Maxillofacial Surgery Foundation and the American Association of Oral and Maxillofacial Surgeons
Faculty Educator Development

Lewis W. Teperman, MD, FACS
HRSA, US Health Resources and Services Administration
Increasing Liver Donation Through Peer-Developed Education: Baseline Survey

Leadership

New York University

Martin Lipton, Esq.
Chair, Board of Trustees

John Sexton
President

Robert Berne, PhD
Executive Vice President for Health Affairs

NYU Langone Medical Center

Kenneth G. Langone
Chairman, Board of Trustees

Robert I. Grossman, MD
The Saul J. Farber Dean and Chief Executive Officer

Steven B. Abramson, MD
Senior Vice President and Vice Dean for Education, Faculty and Academic Affairs

Dafna Bar-Sagi, PhD
Chief Scientific Officer

Bernard A. Birnbaum, MD
Senior Vice President and Vice Dean, Chief of Hospital Operations

Andrew W. Brotman, MD
Senior Vice President and Vice Dean for Clinical Affairs and Strategy, Chief Clinical Officer

H. Leon Pachter, MD
The George David Stewart Professor of Surgery and Chair, Department of Surgery
Since 2006, the Department of Surgery has recruited some of the country’s top talented, skilled surgeons, essentially doubling the size of the department to its current total of 65 full-time attending physicians. But the expansion is about much more than mere numbers; to be recognized as a top-flight surgical program requires excellence in many areas.

The 2012 Department of Surgery Report provides a glimpse of just a few of our recent accomplishments and introduces some of the newest members of our team.

"NOW, HERE, YOU SEE, IT TAKES ALL THE RUNNING YOU CAN DO, TO KEEP IN THE SAME PLACE.

IF YOU WANT TO GET SOMEWHERE ELSE, YOU MUST RUN AT LEAST TWICE AS FAST AS THAT!"

Red Queen’s advice to Alice in Lewis Carroll’s Through the Looking-Glass, March/April 2011)