The Making of a Surgeon

To Fashion "the Complete Surgeon," NYU School of Medicine Is Pulling Out All the Stops

"Surgery is a craft that can be mastered with persistence and devotion," writes Richard Selzer, MD, a surgeon and author, in his essay "The Soul of a Surgeon." "What cannot be easily mastered 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 chairman of the Department of Surgery in 2006, H. Leon Pachter, MD, the George David Stewart Professor of Surgery and chairman of the Department 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 166 students requested advisors for general surgery. The surgical residency program is one of the School's most competitive, accepting only 9 out of 1,000-plus applicants per year. To ensure that apprentices train at the highest level, Dr. Pachter has recruited 23 distinguished surgeons in the past three years, many of them nationally or internationally renowned.

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 residents and surgical residents more challenging," says Mark Hochberg, MD, professor of surgery and director of the surgical clerkship, "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 half the academic medical centers 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. NYU Langone's recently accredited Surgical Skills 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-in-residence, SimMan, helps students train for emergency scenarios that demand split-second decision making.

In collaboration with the American College of Surgeons and the Association for Surgical Education, NYU Langone has also developed the Web Initiative for Surgical Education (WISE-MD), an effort led by Thomas Riles, MD, the Frank C. Spencer Professor of Surgery and associate dean for medical education and technology, and Mary Ann Hopkins, MD, associate professor of surgery. This unique program, supported by Mr. and Mrs. Nicholas Brady and Mr. and Mrs. Frank A. Olson, is now licensed by more than 35 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."

Two grants to the Department of Surgery—from the Arthur Vining Davis and Arnold P. Gold Foundations—are funding 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."

"We have to reverse the trend toward cynicism that can set in," adds Dr. Pachter. "If you lose the heart of
medicine, you've lost it all.