Cancer Care

PICTURE PERFECT

At age 22, Margo Moritz came to UC Irvine Medical Center with symptoms that suggested ovarian cancer. But after a comprehensive exam by Dr. Leonard Sender, a specialist in adolescent and young adult cancers, Margo's condition was diagnosed as Burkitt's lymphoma. This fast-growing cancer rarely occurs in adults, so if Margo had gone to a doctor who treated only adults, her diagnosis may have been delayed. Now in remission, Margo is pursuing a degree in photography.

Cancer is a formidable disease, challenging both body and spirit.

University Hospital's new 30-bed inpatient oncology unit is designed to provide complex medical care in a setting that addresses both the physical and emotional needs of cancer patients. The inpatient oncology unit will move from the medical center's original hospital building to its new quarters in November 2009. The unit is an integral extension of the nearby Chao Family Comprehensive Cancer Center, which provides outpatient care and infusion therapy.

As one of only 41 National Cancer Institute-designated comprehensive cancer centers in the nation, the Chao center is staffed by a world-class team of specialists. They provide highly individualized approaches to fight cancer, incorporating leading-edge diagnostics, surgery, radiation therapy and chemotherapy. This includes access to many new therapies not available at other hospitals. Chao center researchers produce breakthroughs in cancer care and participate in the education of oncology doctors, nurses and scientists. This stimulating environment has attracted some of the world's most respected cancer specialists, making UC Irvine Medical Center a site for the treatment of complex and rare types of cancer, including:

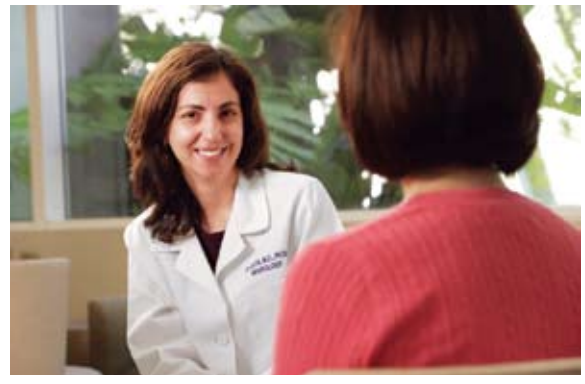
Brain cancer. Each year, UC Irvine neurosurgeons operate on more than 150 brain tumor patients, making the hospital a high-volume site for this type of operation in Southern California. A specialized MRI machine in the operating room allows doctors to view real-time images of the brain during surgery. Treatment is based on a comprehensive medical-surgical approach, which may include customized chemotherapy and other leading-edge therapies such as immunotherapy.

ONE OF A KIND

Dr. Daniela Bota, medical co-director of the UC Irvine Comprehensive Brain Tumor Program, is the only neuro-oncologist in Orange County, and one of only about 300 in the nation.

Esophageal cancer. UC Irvine has led the way with surgical and nonsurgical treatments to destroy precancerous cells that can lead to esophageal cancer. Doctors from UC Irvine's H. H. Chao Comprehensive Digestive Disease Center (CDDC) were also among the first to perform a minimally invasive procedure that strengthens the lower esophageal sphincter to keep stomach acid from flowing backwards. This treats gastroesophageal reflux disease (also known as acid reflux), which can sometimes lead to esophageal cancer. If removal of the esophagus is necessary, minimally invasive techniques are used to remove only the diseased portion—a procedure pioneered by UC Irvine doctors.

Liver and pancreatic cancer. CDDC surgical oncologists were among the first in the world to use minimally invasive techniques for pancreatic surgery. They are also experts in the surgical treatment of liver cancer. Additionally, the team employs nonsurgical strategies, including gene therapy, injections of microscopic radioactive beads into the blood vessel feeding the tumor, and other methods. UC Irvine doctors

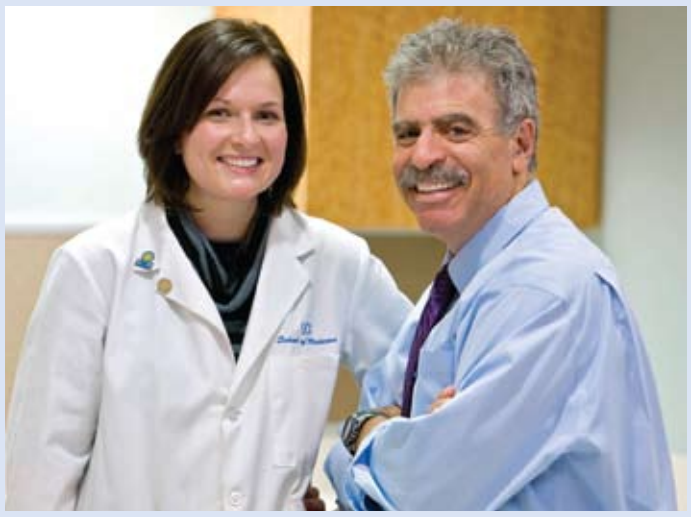


also developed endoscopic ultrasound for the early diagnosis of liver and pancreatic cancer, which is considered to be a superior and less invasive alternative to surgical biopsy.

Prostate cancer. Just a few years ago, removal of a cancerous prostate gland involved a 4-inch incision, a 50 percent chance of surgery-related impotence and a 10 percent chance of urinary incontinence. Pioneering several significant robotic innovations in prostate surgery, UC Irvine Healthcare urologists returned 95 percent of patients to normal continence and 80 percent to regular sexual function. A UC Irvine urologist also discovered that lowering the pelvic temperature to approximately 80 degrees before surgery substantially reduced the average time for patients to regain continence.

Young-adult cancer. UC Irvine cancer specialists are among only a few to focus on the rare types of cancer that strike people ages 21 to 39. They also treat young adults with more common forms of cancer, which often affect this age group differently from older people. Chao Family Comprehensive Cancer Center oncologists are advocates for more clinical trials related to this age group, as well as a greater understanding of the psychosocial problems facing these patients and their need for age-tailored treatment regimens.

Colorectal cancer. Advanced colonoscopy imaging techniques help specialists detect otherwise subtle precancerous polyps that are often missed by standard methods. Further, a new generation of minimally invasive approaches has improved outcomes for colorectal cancer patients, preserving normal bowel, urinary and sexual function in most cases. Because these procedures are highly specialized and require extensive training, not all surgeons are qualified to perform them. At UC Irvine Medical Center, these state-of-the-art approaches are standard care, improving the quality of life for countless people.



INNOVATION STATION

Dr. Dan Cooper, director of the Institute for Clinical and Translational Studies, meets with medical student Dana Graven. The ICTS is located inside University Hospital to foster new ideas in healthcare.

DEDICATION TO DISCOVERY

It's small, but mighty. Located on the sixth floor of the new University Hospital, the Institute for Clinical and Translational Studies (ICTS) will play an important role in the future of healthcare. "Its purpose is to encourage medical discoveries by providing hospital personnel with the information and guidance they need to turn their healthcare-related insights into breakthroughs," says ICTS Director **Dr. Dan Cooper**, a pediatric pulmonologist.

If a doctor or nurse has an idea about a new medical or surgical possibility, he or she can drop by the ICTS immediately to discuss it with an expert. The ICTS is staffed with some of the best and the brightest physicians and scientists in the nation, who take turns mentoring in the facility. The process is designed to be a collaborative one, with strong links to the university's College of Health Sciences. A telecommunications center in the ICTS can put a visitor in touch with virtually any type of expert needed, ranging from social scientists to chemists. "We wanted to break down the barriers that get in the way of investigating potential medical discoveries," says Cooper. "UC Irvine is among the first in the nation to literally build the quest for discovery into the structure of its hospital."

With three patient beds for subjects enrolled in clinical trials, the ICTS is furnished with a laboratory and kitchen in which special meals can be prepared for study participants. "The ICTS reflects a new direction by the National Institutes of Health (NIH), which calls for the creation of innovative environments in which the process of discovery can be promoted," says Cooper. NIH provides $1.6 million annually to fund the hospital's General Research Clinical Center (GRCC), the precursor of ICTS. These funds will be transferred to ICTS as the GRCC is phased out.

"Our expectation is that ICTS will generate new knowledge of immediate and long-term importance to the healthcare of people throughout the region and world," says Cooper. "Additionally, ICTS will inspire the next generation of healthcare professionals to focus on the possibilities of medicine and turn these ideas into realities."