Dr. Elspeth McDougall and Dr. Ralph Clayman, professors of urology, have teamed up with Dr. Duane Vajgrt, associate clinical professor of interventional radiology at University of California, Irvine Medical Center, to bring the latest in minimally invasive therapy for renal cancer to the Orange County community. Drs. Clayman and McDougall have pioneered less invasive therapies for renal cell cancer starting with the world's first laparoscopic "keyhole" removal of the kidney for renal cancer in June of 1990 and the world's first laparoscopic removal of part of a kidney (i.e., partial nephrectomy) for renal cancer in January 1996. In their ongoing quest to find less invasive, yet equally effective, treatment for renal cancer, they have embarked into the field of cryotherapy (i.e., ‘freezing’ therapy).

The 17-gauge cryoprobe is seen alongside a dime. The diminutive size of these powerful probes can be readily appreciated.

In their ongoing quest to find less invasive, yet equally effective, treatment for renal cancer, they have embarked into the field of cryotherapy (i.e., ‘freezing’ therapy).”

Dr. McDougall and Dr. Clayman’s new cryotherapy involves a needle probe that is no bigger than a typical blood-drawing needle; however, using super-cooled argon gas, this special type of hollow needle is capable of producing cold temperatures at its tip of minus 190°C. As such, the needle when properly placed will develop an area around it at which temperatures are down to minus 40°C, which is uniformly lethal to any living cell. A typical 17-gauge needle probe will provide a sphere of effective freezing therapy for almost ¾ of an inch in diameter, centered around the tip of the needle probe. These probes were initially placed under ultrasound guidance during open and, more recently, laparoscopic surgery. However, due to the decrease in their size and the improvement of X-ray imaging, these small needle probes can now be placed under CT fluoroscopy using only intravenous or light general anesthesia. The resulting "ice ball" can be easily visualized as it encompasses the targeted renal tumor. As such, during the therapy, the evolving ice ball can be carefully followed and tracked to ensure that the entire tumor has been encompassed. Slightly larger lesions (i.e., up to 1-1.5 inches) may require two, three or even four needle probes to be placed.

To date at UC Irvine, seven patients have been treated using laparoscopic or percutaneous cryotherapy. After each percutaneous treatment, patients have usually been able to leave the hospital.
on the following morning. Follow-up consists of radiographic imaging studies at specified time periods, just as would be done if one had an open or laparoscopic removal of a small renal tumor at which time the rest of the remaining, healthy kidney is left intact.

Earlier work with cryotherapy at UC Irvine was done solely via the laparoscopic approach, at which time the kidney was completely dissected, the renal tumor identified, and then under ultrasound guidance the cryoprobe was placed into the tumor. Drs. Clayman and McDougall have had extensive experience with this approach, which again afforded very high-risk patients the ability to treat their renal tumor with the least amount of invasiveness. However, the percutaneous procedure now means that, instead of a lengthy laparoscopic procedure under general anesthesia via multiple small skin incisions, the procedure can be shortened and the morbidity reduced to a single needle track, so small, that after the procedure there are no visible scars.

To date using either laparoscopic or percutaneous cryotherapy, over 400 patients have been treated nationwide. While follow-up extends as long as nine years, the average follow-up is still relatively short at four years. Nonetheless, the incidence of recurrent disease at the site of therapy is only 2.5-4%. Indeed, when a recurrence does occur, it can be controlled with additional cryotherapy or laparoscopic excisional surgery. It is of particular importance that, to date, following cryotherapy of renal tumors, the cancer specific survival has been 100%, and none of the patients in any of the series reported to date have developed metastatic disease (albeit with follow-up only out to a maximum of five years following cryotherapy of renal tumors).

The collaboration of the Departments of Urology and Radiology to work closely together has resulted in a significant advance in renal cancer therapy to the benefit of all patients in the Orange County community who have a kidney tumor. Today at UC Irvine fewer than 5% of patients require any form of open surgery to treat their kidney cancer. Verily, the hallmark of the Department of Urology at UC Irvine over the past four years has been its dedication to minimally invasive surgery and to its mission of providing all urology patients with the greatest amount of cure with the least amount of pain or suffering.

What will the future bring? There already are ongoing studies examining totally noninvasive means of treating renal tumors. Examples of this would include high-intensity focused ultrasound as well as a radiation-producing cyberknife. However to date, almost all of these studies have been in the laboratory only, and the few clinical investigations have been disappointing. Nonetheless, there is little doubt that as our technology improves so will our ability to effectively treat a large variety of cancers, renal and otherwise, in the least invasive manner by needle or by totally noninvasive therapy. As Sir William Osler stated at the beginning of the 20th century, "Diseases that harm require treatments than harm less." At UC Irvine, at the dawning of the 21st century, this has become our everyday goal.

For more information or appointments or referrals, please call:

Ralph V. Clayman, MD
Professor and Chairman
Department of Urology
Tel: 714-456-3418

Elspeth M. McDougall, MD, FRCSC
Professor of Urology
Tel: 714-456-7005

Duane J. Vajgrt, MD
Associate Clinical Professor
Department of Radiological Sciences
Tel: 714-456-5930

A laparoscopic 3 mm cryoprobe (arrow), quite a bit larger than the needle probe, is being inserted into a kidney tumor under laparoscopic and ultrasound guidance. In the right panel, the resulting ice ball can be readily appreciated.

“...following cryotherapy of renal tumors, the cancer specific survival has been 100%, and none of the patients in any of the series reported to date have developed metastatic disease (albeit with follow-up only out to a maximum of five years following cryotherapy of renal tumors).”
Dr. Allan Shanberg announces his pending retirement

“...goal is to establish an endowed chair in Pediatric Urology named in honor of Dr. Shanberg.”

After nearly half a century of delivering urological care to the children and adults of Orange County, it is with great sadness that the Department of Urology has accepted the retirement of Dr. Allan Shanberg. Dr. Shanberg was, to the best of my knowledge, the first urologist in Orange County to truly focus on the care of children with urologic diseases.

In that regard, he provided a service that was sorely lacking, as many young people are afflicted with urological conditions which, if corrected during their infancy or childhood, can preclude a lifetime of suffering and impaired longevity. In addition, Dr. Shanberg, due to his protean surgical talents, also ministered to many of the adult population of Orange County specializing in the areas of laser surgery and urologic oncology. Indeed, with regard to the former, Dr. Shanberg was one of the pioneers in applying laser physics to the treatment of urological conditions. He lectured at many courses in this regard and presented multiple papers in this area. Furthermore, Dr. Shanberg is one of those unusual individuals who sees opportunity in each new day. As such, his interest in urology throughout the years has always been on the crest of new developments. In this regard, in the last four years during my tenure at University of California, Irvine, I have watched Dr. Shanberg develop not only significant laparoscopic skills but also robotic surgical abilities. Indeed, he has developed one of the largest series of laparoscopic surgery applied to bladder cancer in the country. I am delighted that he has consented at least to stay on in a teaching role from which our residents will greatly benefit.

However, at the end of the day, one must always ask what remains. What is one's legacy? Truly, it would be a shame to allow an individual who has devoted 37 years of his lifetime to exemplary health care of the adults and children of Orange County to fade into the distance without a modicum of ongoing recognition. To this end, it has been my goal to establish an endowed chair in Pediatric Urology named in honor of Dr. Shanberg. Presently, in the Department of Urology there are no endowed chairs. This would be the first endowed chair in the Department of Urology. The establishment of the Shanberg Chair in Pediatric Urology would enable us to further support and cultivate this aspect of urology in Orange County.

Contributions toward the chair would be greatly appreciated, and I am hopeful that some of you will find the time to contact me directly if you have interest in providing a substantial gift that will allow for the joint naming of this chair.

Ralph V. Clayman, MD
Professor and Chairman, Department of Urology
Tel: 714-456-3329

Best Hospitals 2006
University of California, Irvine, Medical Center
Rank #27: Urology

In the July 17, 2006 issue of the U. S. News and World Report, the Department of Urology was rated 27th among 5,189 hospitals in the United States. This is the first ever ranking of urology at the University of California, Irvine. While UC Irvine Medical Center has consistently ranked among the top 100 hospitals in the United States, this is the first time in the history of the medical school that urology has made the top 50. Rankings are determined by reputation among physicians, patient mortality, number of Medicare discharges, technology, and patient/community services. This is high praise for the entire urology team and good news for the community we serve.
Physician-to-Physician Red Phone Hot Line

Physicians, are you tired of not being able to reach a urologist immediately? The red phone is reserved just for physicians.

In an effort to better serve Southern California physicians and their patients, the Department of Urology faculty are pleased to initiate a Physician-to-Physician Red Phone Hot Line!

Now, you can reach one of our urologists immediately -- 24 hours a day. One of the urology faculty at the University of California, Irvine Medical Center will be carrying this cell phone at all times and will answer your phone call directly. As a reminder, we have the largest number of fellowship-trained urologists practicing in Orange County. Our urologists are highly recognized experts specializing in the areas of -

- laparoscopic surgery
- kidney and ureteral stones
- robotic surgery
- urological oncology
- renal and ureteral diseases
- female urology
- neuourology
- infertility
- erectile dysfunction
- reconstructive urology
- pediatric urology
- endoscopy
- minimally invasive surgery

For more information, please call 714-456-3418.

University of California, Irvine Receives Special Accreditation from American College of Surgeons

"It's an honor that our great strength in minimally invasive surgery has been accredited nationally."

The University of California, Irvine is one of only six institutions in the nation to be awarded a Level I Comprehensive Accredited Educational Institute designation by the American College of Surgeons. The Minimally Invasive Surgery Education Center at UC Irvine Medical Center received this recognition for its multidisciplinary, comprehensive activities for both medical students and practicing surgeons. Home to the C3REST™ Center for Urological Education, the center also offers training in minimally invasive techniques to all surgical departments in the School of Medicine. "This is a tremendous accomplishment for UC Irvine," said center director Dr. Elspeth McDougall, a professor of urology. "It's an honor that our great strength in minimally invasive surgery has been accredited nationally."

I want to take this opportunity to announce that University of California, Irvine has been approved by the American College of Surgeons as a Level I Accredited Education Institute. This recognition is due to the fine work of Dr. Elspeth McDougall and Dr. Ralph Clayman and their associates who developed the proposal and the program for the site visitors. This is especially significant because there are only seven such centers across North America. I am delighted on behalf of all the surgical services that this outstanding recognition has come to UC Irvine. I believe that this is continuing evidence of the fine progress that our faculty members are making and the recognition that the institution is getting nationally.

Thomas C. Cesario, MD
Dean
University of California, Irvine

Elspeth McDougall, MD
Professor of Urology
Director, C3REST™ Center for Urological Education

Cynthia Shell
Education Coordinator
Department of Urology
New Role for Dr. David K. Ornstein

Medical Director
Urologic Oncology and Robotic Surgery Program
Long Beach Memorial Medical Center

Dr. David Ornstein will be responsible for developing and building a multidisciplinary surgical robotics program at Long Beach Memorial Medical Center. He will perform robotic surgeries on his own private patients with urologic malignancies. He will also teach and proctor community surgeons on urologic and other robotic procedures.

In addition, Dr. Ornstein will serve as the co-chairman of the Genitourinary Oncology Tumor Board.

For appointments and referrals, please call: 714-456-5378

Dr. Ornstein seated at the console of the da Vinci® Robotic Surgical System

ARAISE Award for Academic Achievement

Dr. Elspeth McDougall has always been willing to share her vision of education; her knowledge and passion for physician education is compelling. During her presentations, I am always energized and impressed by her work and the degree of excellence she has brought to University of California, Irvine. I am most pleased to present Dr. McDougall with the ARISE award in academic excellence.

Dr. McDougall has created a major educational endeavor at UC Irvine Medical Center. She currently serves as the director of the C3REST™ Surgical Training Center. This center has been responsible for the training of over 2,400 surgeons, residents, and medical students over the past 2.5 years. Courses at the center have been held in general surgery, colon-rectal surgery, GI endoscopy, vascular surgery, trauma, OB-GYN, ENT, and urology. The center facilities have been expanded to include over 3 million dollars in teaching equipment: surgical robots, pelvic trainers, and surgical simulators. In addition, Dr. McDougall is very active in the development of surgical simulation training at UC Irvine for postgraduate surgeons and serves on the medical school committee for this same initiative. She has also developed a curriculum for urology residents as well as a basic handbook in laparoscopic urology. The latter has been adopted by the American Urological Association and was recently distributed to all urology residents in the United States.

Each quarter five faculty or staff are selected for ARISE awards. People may be nominated for one of UC Irvine Medical Center's five institutional values - Academic Achievement, Respect, Integrity, Service or Excellence. Winners are selected by the ARISE Recognition Subcommittee, who are former ARISE winners. Our values provide the foundation for our future as a great academic medical center. Through our ARISE quarterly awards, ARISE tokens and departmental activities, we strive to recognize those staff, physicians and students who demonstrate the best that we can be.

Patricia Thatcher
Executive Director of Human Resources
UC Irvine Medical Center

www.ucihs.uci.edu/urology
To contact us: 714-456-7005
Thanks to your donations, the Department of Urology hosted Dr. Jack W. McAninch as a visiting professor, July 27-29, 2006.

He has developed new surgical techniques in urethral and genital reconstruction and has been instrumental in improving the care of patients who sustain urogenital trauma and in preserving kidney, bladder, penile, testicle and urethral function.

This three-day training course in urologic surgery was presented to University of California, Irvine, Department of Urology faculty and residents, as well as community urologists, and focused on new technologies in genitourinary trauma and reconstructive surgery. As part of Dr. McAninch's course, a surgical teaching lab was provided for the Department of Urology residents on new surgical techniques in trauma.

To friends of the Department of Urology -

Many thanks for your support!

As a result of your generous contributions, the Department of Urology provides educational programs to benefit our residents, fellows, and our urological colleagues in the community.

All contributions to the Department of Urology are greatly appreciated. Contributions by check should be made payable to: The UCI Foundation

For further information, please contact: Ralph V. Clayman, MD, Professor and Chair Department of Urology at 714-456-3418.

Your donation may be mailed to -
Ralph V. Clayman, MD
University of California, Irvine
Medical Center
Department of Urology
Bldg 55, Room 304
101 The City Drive
Orange, CA 92868

"It is our desire to train the very best urologists in the country. To be sure, the support of the Orange County community in this endeavor is essential."

Ralph V. Clayman, MD
Professor and Chair

The Department of Urology Welcomes Two New Faculty

Dr. Kundu has a strong background in tissue engineering, polymer chemistry and biomedical engineering. He received his doctorate degree from Tokyo Institute of Technology and completed post-doctoral training in Chemical and Biomedical Engineering at UC Irvine. In collaboration with Dr. Tyson, Dr. Gelman and Dr. Clayman, Dr. Kundu will develop urethral and bladder tissue engineering facilities in the Department of Urology.

Dr. Sadoughi’s interest and expertise are in urologic oncologic surgery and neuromuscular dysfunction of the lower urinary tract for urinary incontinence. He is actively involved in teaching urology residents and supervising them at the VA Long Beach Healthcare System.
Dear Friends:

Children with urologic abnormalities are among the most underserved patients in Orange County. The reason for this is twofold. First, there is a "manpower" issue with regard to the hiring of fellowship-trained pediatric urologists, and second, the concern is the availability of financial resources necessary to attract and maintain these physicians within our community. Indeed, at this point in time, there are only four urologic surgeons in all of Orange County who devote the majority of their time to pediatric urology and only one fellowship-trained urologist whose practice is 100% committed to the care of our children.

As such, I have made it a primary goal for the University of California, Irvine, Department of Urology over the next year to establish the first endowed chair in the department, a Chair in Pediatric Urology. An endowed Chair in Pediatric Urology would greatly enhance our ability to attract and maintain a fellowship-trained pediatric urologist. For this chair, I would seek to honor Dr. Allan Shanberg, who was among the first urologists in Orange County to specialize in pediatric urology and who has served our community in this regard longer than any urologist in our community.

A million dollars is necessary to endow a chair in the medical school at UC Irvine. To date, we have been successful in raising close to $200,000, still far short of the needed amount. As such, your contributions to this important project are truly invaluable. Gifts in all amounts are greatly appreciated and acknowledged. The possibility of a large donation, which would complete the chair, would carry with it the opportunity to also name the chair in honor of the donor.

In addition, as of January 1, 2006, the Department of Urology has initiated a Centurion Club to aid in the development and direction of our urology program. Members of this group have pledged $10,000 in support of the educational and research goals of the department. The driving force behind establishing this group of individuals is to obtain 100 members, thereby assuring, the realization of the Chair in Pediatric Urology. This group of individuals will also be invited to participate in the ongoing and future direction of the Department of Urology, as we seek to realize our goals of bringing the very best patient care to the Orange County community (coupled with superb re-search contributions and outstanding educational opportunities for our residents, medical students, fellow community urologists, and the public).

It is my sincere hope that the creation of a Chair in Pediatric Urology will be realized by the end of this year. Again, I am very thankful for your support in this regard and believe that the overall beneficiaries of your generosity will be all of our children.

Many thanks for your thoughtful consideration.

Yours sincerely,

Ralph V. Clayman, MD
Professor and Chairman
Department of Urology

To contact us:  714-456-7005  www.ucihs.uci.edu/urology
UC Irvine Medical Center - Department of Urology
Clinical Faculty

Ralph V. Clayman, MD
Professor and Chairman
Department of Urology
Dr. Clayman is world renowned for his clinical and laboratory work in minimally invasive surgery. He specializes in the treatment of kidney stones, kidney cancer, strictures of the ureter and all other aspects of renal and ureteral diseases.

For appointments and referrals, please call:
714-456-3418

Thomas E. Ahlering, MD
Professor and Director, Urological Oncology
Dr. Ahlering is well known for laparoscopic radical prostatectomy using the da Vinci® robotic surgical system. He specializes in treatments for cancer of the prostate, bladder, kidney, and testis. He did his postgraduate fellowship training in Urological Oncology at University of Southern California, Los Angeles.

For appointments and referrals, please call:
714-456-6068

Barry P. Duel, MD, FAAP, FACS
Associate Clinical Professor, Pediatric Urology
Dr. Duel specializes exclusively in the urologic care of children. His clinical interests include reconstruction of complex anomalies and pediatric minimally invasive surgery. He did his postgraduate fellowship training in Pediatric Urology at Children’s Hospital of Michigan in Detroit.

For appointments and referrals, please call:
714-456-4164

Joel Gelman, MD
Assistant Clinical Professor
Director, Center for Reconstructive Urology
Dr. Gelman has expertise in male urethral and genital reconstruction and sexual dysfunction. He did his postgraduate fellowship training in Adult and Pediatric GU Reconstruction at Eastern Virginia Medical Center, Norfolk, Virginia.

For appointments and referrals, please call:
562-433-4000

Regina M. Hovey, MD
Associate Clinical Professor
Director, Urology Residency Program
Dr. Hovey specializes in female urology, urinary incontinence, neuourology, and lower urinary tract reconstruction. She did her postgraduate fellowship training in Female Urology, Neuourology and Reconstructive Urology at University of California, Davis.

For appointments and referrals, please call:
714-456-7128

Jerry B. Miller, MD
Clinical Professor
Dr. Miller specializes in general practice urology and supervises residents-in-training in the general urology clinic.

For appointments and referrals, please call:
714-456-7005

Elspeth M. McDougall, MD, FRCSC
Professor and Director of the C3REST™ Center for Urological Education
Dr. McDougall specializes in minimally invasive surgery for the treatment of kidney stones, kidney cancer and strictures of the ureter.

For appointments and referrals, please call:
714-456-7005

David K. Ornstein, MD
Assistant Professor
Dr. Ornstein completed a fellowship in urologic oncology at the National Cancer Institute. He now treats patients with all types of urologic cancers. He has extensive experience with open, laparoscopic, and robotic surgery, and is particularly interested in potency and continence-sparing radical prostatectomy using the da Vinci® Surgical Robot.

For appointments and referrals, please call:
714-456-5378

Leland Ronningen, MD
Associate Clinical Professor
Dr. Ronningen is particularly interested in benign diseases of the prostate and practices general urology. He received his urology training at Letterman Army Medical Center, Presidio of San Francisco and at the Portsmouth Naval Hospital in Portsmouth, Virginia.

For appointments and referrals, please call:
714-456-7005

Nader Sadoughi, MD, FACS
Clinical Professor
Dr. Sadoughi's interest and expertise are in urologic oncologic surgery and neuromuscular dysfunction of the lower urinary tract for urinary incontinence. He is actively involved in teaching urology residents and supervising them at the VA Long Beach Healthcare System. He did his postgraduate fellowship training at Sloan Kettering Cancer Center in New York.

For appointments and referrals, please call:
562-826-8000 x5562

Anne R. Simoneau, MD
Associate Clinical Professor
Assistant Director, Urological Oncology
Dr. Simoneau has clinical trials in prostate cancer prevention and is working in the laboratory on bladder and prostate cancer prevention. She completed a 2-year AFUD scholarship studying bladder cancer genetics, followed by a postgraduate Clinical fellowship year in Urological Oncology at University of Southern California, Los Angeles.

For appointments and referrals, please call:
888-456-7067 or 714-456-6485

Aaron Spitz, MD
Assistant Clinical Professor
Male Reproductive Medicine and Surgery
Dr. Spitz has expertise in the treatment of male infertility and sexual dysfunction. He did his fellowship training at Baylor College of Medicine, Houston, Texas.

For appointments and referrals, please call:
714-456-7005
Driving Directions to University of California, Irvine Medical Center --
From I-5 take the Chapman Avenue exit.  Drive westbound on Chapman.  Turn left (south) onto The City Drive.  Proceed to Dawn Way.  Turn left.  The UC Irvine Medical Center visitor parking structure is on the left side.  Upon exiting the parking structure, continue down the broad walkway until you see Miss Kelly’s Coffee Cart on your right side.  On your left side is the entry to the Pavilion III Urology offices.  If you are lost, please call 714-456-7005.

Visit the Department of Urology on the Web at -- www.ucihs.uci.edu/urology

To contact us:  714-456-7005