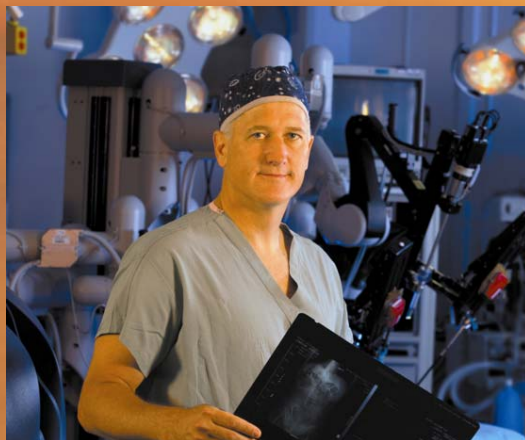


Your Urology

Department of Urology

www.urology.uci.edu

Spring 2010



Thomas E. Ahlering, M.D., FACS
 Professor and Vice Chairman
 Department of Urology

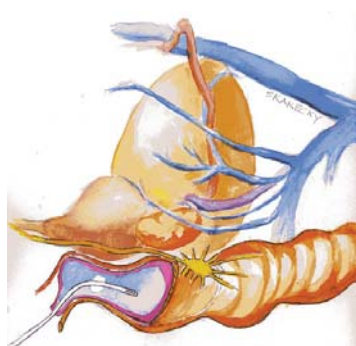
Awards and honors for the UC Irvine urology research team for their recent findings in prostate cancer

Internationally recognized, **Dr. Thomas Ahlering** has helped pioneer the use of the da Vinci® robot for prostate cancer surgery in the United States, Europe, Asia and Australia. He performed the first robotic prostatectomies in Denmark, Canada and Australia. Now in its ninth year, the University of California, Irvine robotics program is one of the most respected, with more than 900 robotic prostatectomies performed and more than 120 scientific publications and book chapters. UC Irvine urologists have published more than 15 abstracts and papers on the principles of the nerve sparing technique. The references listed on page two formed the background for the surgical cooling technique.

In addition, surgeons continue to come from throughout the United States, Canada, Europe, Asia, Middle East, and South America to visit and learn these techniques, via week-long mini-fellowships and scientific programs sponsored by the American Urological Association.

Dr. Ahlering's honors include America's Best Doctors designation, Who's Who, Physician of Excellence-Orange Coast Magazine, and Intuitive Surgical's Pioneer of da Vinci Urology Surgery. He is the past president of the Western Section of the American Urological Association.

Dr. Thomas Ahlering introduces pioneering cooling technique preserving nerves after robotic-assisted prostatectomy



Endorectal cooling balloon
 with recirculating cold water, (outlined in purple), is placed below the nerve bundle for sexual function (yellow) and beneath the prostate and urinary bladder (brown).

Novel technique for reducing inflammation injury to the bladder sphincters and nerves for sexual function

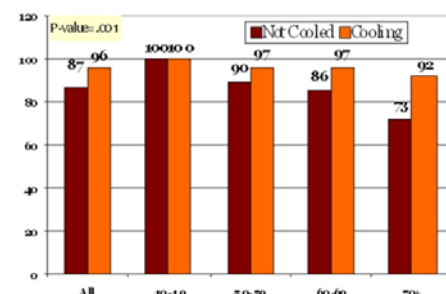
This technique of hypothermic cooling improves urinary continence. Prior work by **Dr. Thomas Ahlering** and his associates formed the basis for a better understanding into the mechanisms responsible for delaying return of urinary and sexual function following surgery. When a surgeon performs ideally and avoids injury to the sexual nerves and the sphincters responsible for urinary control, most men take weeks to months to recover. There is much evidence to suggest that the normal trauma of surgery plays a major role in this problem.

Research at UC Irvine Medical Center has demonstrated that cooling of the continence sphincters and cavernosal nerves during robotic prostatectomy (like icing a sprained ankle) reduces surgically related trauma and inflam-

-mation, leading to faster and better overall urinary continence and sexual outcomes.

We can preemptively cool the region before the injury occurs -- hence, HYPOTHERMIC robotic prostatectomy. We devised an endorectal cooling balloon to locally cool the pelvic region to 60-68°F. The cooling balloon is placed and removed while the patient is asleep. It is safe, easy, painless and remarkably simple. Postoperative results on urinary continence demonstrate a reduction from 60 to 40 days to be free of urinary pads (Figure below).

Age of men vs % pad-free at one year



continued on page 2



Dr. Thomas Ahlering seated at the da Vinci robot console

Research has shown that surgical injury to nerves can be avoided by using a new and innovative hypothermia surgical technique, improving long-term quality of life in men following robotic prostate surgery.

These promising initial results validate the wisdom of preemptive cooling to satisfy the Hippocratic Oath: "First, do no harm." Another critical finding is that the overall percentage of men becoming pad-free has risen to approximately 96%.

We now understand which mechanisms support the return of sexual function

Since 2002 when we started our program, we have published nine peer-reviewed scientific papers laying the groundwork leading to hypothermia cooling techniques. Our first three publications dealt with the damage to nerves from thermal energy (heat) and how to avoid it. However, we learned that thermal energy does not kill the nerve; it only injures it. This injury is recoverable as long as the nerve sheath is still intact. However, even when thermal injury is avoided, there is evidence of a stretch injury. With stretch injury some men recovered within 2-3 months (grade I), whereas others take 9-24 months (grade II) because the nerve has to grow from the prostate to the end of the penis. If the nerve was transected, the nerve function is lost because the nerve can't regrow (grade III). Another important finding is that the sexual nerves have a lot of redundancy. This means that sexual function, which we normally think requires two nerves, will recover with just one nerve 80% of the time (very similar to removing one kidney). Hence, sparing every nerve is not as important for sexual function as is reducing the inflammatory stretch injury.

Our current postoperative potency data demonstrates that for normal men to regain sexual function, an increase of 25% at 15 months from 66% to 83% (Chart below).

References

Hypothermic nerve-sparing radical prostatectomy: rationale, feasibility, and impact of early continence. *Urology* 73(4): 691-696, 2009.

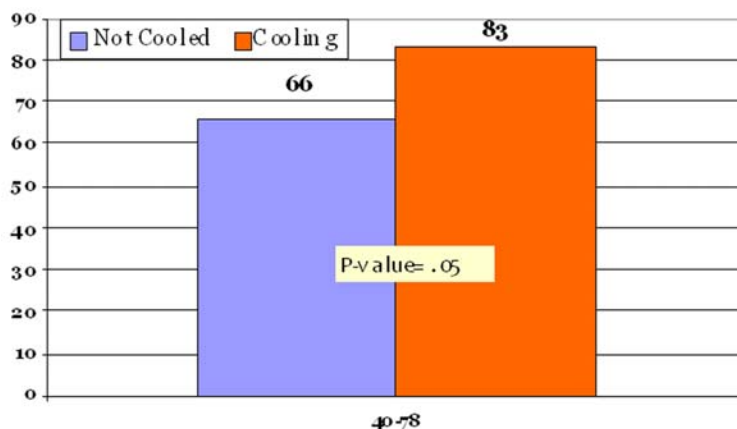
Hypothermic radical prostatectomy: impact on continence. *J. Endourology* 23 (9): 1443-1450, 2009.

Thomas E. Ahlering, M.D.
For appointments and referrals,
please call -- 714.456.6068
9 am - 3:45 pm

Michael Louie, M.D.
For appointments and referrals,
please call -- 714.456.7005

Atreya Dash, M.D.
For appointments and referrals,
please call -- 714.456.7005

Percentage of prepotent men regaining sexual function at 15 months



Now ranked 18th in the country by U.S. News & World Report, University of California, Irvine urological surgeons continue to research new innovations in surgical techniques, cancer control, and cancer prediction diagnostics for long-term prostate cancer survival. Three UC Irvine surgical innovations for reducing surgical margins have produced margin rates to one of the lowest reported in the literature.

References for understanding sexual function

Feasibility Study for Laparoscopic Radical Prostatectomy Cautery Free Neurovascular Bundle Preservation.

Urology 65(5): 994-998, +video, May 2005. Summary: This study presents a new technique preserving sexual function by the elimination of the use of electrocautery when preserving the potency nerves of the neurovascular bundle. This is the follow-up paper to the technique first published in an abstract in September 2004. This technique allows for careful control of bleeding from the many blood vessels, which are intertwined with the potency nerves. Without this control, the bleeding will obscure the potency nerves and make saving these nerves more difficult. This paper is presented with a 7-minute on-line video from the journal showing this novel technique.

Early Potency with Cautery Free Neurovascular Bundle Preservation Study with Robotic Laparoscopic Radical Prostatectomy. *J. Endourology* 19(6): 715-718, July/Aug 2005.

Summary: We present the first published results for this new technique for cautery free neurovascular bundle preservation for return of potency, where ~50% of pre-potent men, less than 66 years old with unilateral or bilateral nerve preservation, return to satisfactory erections within three months.

Impact of Cautery versus Cautery Free Preservation of Neurovascular Bundles on Early Return of Potency. *J. Endourology* 20(8): 586-589, Aug 2006.

Summary: In this invited paper by the journal, we verified our earlier report from the previous year with approximately twice the number of men. The promising early results remained essentially unchanged -- bundle preservation for return of potency, where ~45% of pre-potent men, less than 66 years old with unilateral or bilateral nerve preservation, return to satisfactory erections within three months.

Spread of Thermal Energy and Heat Sinks: Implications for Nerve Sparing Robotic Prostatectomy. *J. Endourology* 21(10):1195-1198, Oct 2007.

Overcoming Obstacles: Nerve Sparing Issues in Robotic-Assisted Laparoscopic Prostatectomy. *J. Endourology* 22(4): 745-750, April 2008.

Evaluation of Long-Term Thermal Injury Using Cautery During Nerve Sparing Robotic Prostatectomy. *Urology* 76(6): 1371-1374, 2008.

Prostate Weight and Early Potency in Robot-Assisted Radical Prostatectomy. *Urology* 76(6):1263-1268, 2008.

Single Institution 2-Year Patient-Reported Validated Sexual Function Outcomes after Robotic-Assisted Radical Prostatectomy. *J. Urology* 181 (1): 259-263, 2009.

Quantitative and Qualitative Analysis of Potency Recovery Following Unilateral Nerve Sparing Prostatectomy (RLP). *BJU Int* Oct, 2009.

What men need to know about their prostate

What is the prostate?

The prostate is part of a man's sex organs. It is a gland about the size of a walnut that surrounds the urethra. The urethra is the tube that carries urine and semen out of the body. The prostate adds fluid to the semen when you ejaculate.

What are prostate problems?

Did you know that a frequent need to urinate or painful urination could be caused by a problem with your prostate? For men under age 50, the most common prostate problem is prostatitis, meaning the prostate is inflamed. For men over age 50, the most common prostate problem is prostate enlargement. This condition is also called benign prostatic hyperplasia, or BPH.

What are the symptoms of prostatitis?

Prostatitis can cause painful, burning, or frequent urination. You may have a fever or pain in your lower back or genital area.

What causes prostatitis?

Prostatitis is sometimes caused by bacteria. But usually no bacteria are present and doctors will look for other possible causes of urinary symptoms, such as a kidney stones or cancer. If no other causes are found, your doctor may decide you have nonbacterial prostatitis.

How is prostatitis treated?

If you have bacterial prostatitis, your doctor can give you an antibiotic to fight the infection. If you keep getting infections, you may have a defect in your prostate that allows bacteria to grow. This defect can usually be corrected with surgery. Antibiotics will not help nonbacterial prostatitis. Instead, your doctor may give you a medicine to relax the muscle tissue in the prostate. Changing your diet or taking warm baths may also help.

What are the symptoms of BPH?

Some symptoms of BPH include --

- ❖ a frequent and urgent need to urinate
- ❖ trouble starting a urine stream
- ❖ a weak stream of urine
- ❖ the feeling you still have to urinate, even when you have just finished
- ❖ small amounts of blood in your urine

What causes BPH?

As men get older, their prostate keeps growing. As it grows it squeezes the urethra. Since urine travels from the bladder through the urethra, the pressure from the enlarged prostate may affect bladder control.

How is BPH treated?

You'll have to work with your doctor to find the best treatment for you. Some options are --

- ❖ living with your symptoms, if they don't bother you too much, and regular checkups to make sure your condition isn't getting worse
- ❖ medicines to shrink or relax the prostate
- ❖ a nonsurgical procedure to remove parts of the prostate
- ❖ surgery to remove part of the prostate

What else could cause the same symptoms?

Frequent or painful urination, especially with blood in the urine, could be signs of bladder cancer. If you have these symptoms, see your doctor right away.

Michael Louie, M.D.

For appointments and referrals, please call -- 714.456.7005

Atreya Dash, M.D.

For appointments and referrals, please call -- 714.456.7005

Preparing for surgery - mind, body and spirit

Increase your knowledge of anesthesia and surgery and learn relaxation techniques to promote wellness. Free sessions first and third Monday of each month, 4:00 p.m - 5:00 p.m.

UC Irvine Douglas Hospital, 3rd floor, room 3001

You will learn about:

- ❖ Anesthesia, surgery and pain management strategies
- ❖ What to expect at the hospital before, during and after surgery
- ❖ The connection between emotional well-being and health and healing
- ❖ Relaxation techniques -- guided imagery and yoga breathing techniques that you can do yourself
- ❖ What you can do to best prepare for your surgery
- ❖ Support services that are available

All workshops are taught by UC Irvine anesthesia and perioperative physicians and nurses.

Call toll free 877.UCI.DOCS (877.824.3627) for more information or to register. Your support person is welcome to attend.



Organ donation - please visit

www.donatelifecalifornia.org

This site allows you to sign up online to be an organ and tissue donor in California. Your organ donation could save the lives of eight people, and your tissue donation enhance the lives of another 50 people.

After a long illness, a patient who was a beloved father, son and brother lost his life at UC Irvine Medical Center and afterward, his family made the difficult decision to consent to organ donation. In this case, the patient's liver and pancreas helped to advance important medical research that could potentially lead to better treatments and/or finding cures for countless others. We are grateful for the selfless contribution they made toward healing those in need. Along with a warm note of gratitude from our medical center leadership, this family received a Donate Life flag and was recognized through our Adopt-a-Family program. And, thank you to our medical center staff for the outstanding care they provide every day to our visiting families and their loved ones.

Ralph V. Clayman, M.D.
Dean, School of Medicine

Terry A. Belmont, Chief Executive Officer

Eugene Spiritus, M.D., Chief Medical Officer

Opening of CHOC Children's Urology and Nephrology Center

As of January 13, 2010, all pediatric urology services, including the CHOC Urology Clinic, are offered at the new center, directed by **Dr. Tony Khoury**.

As Orange County's only dedicated pediatric urology facility, our specialists offer comprehensive urological and nephrologic services, dedicated to providing the most innovative and clinically advanced care available.

Our multidisciplinary team offers the following services in a convenient, family-centered care environment:

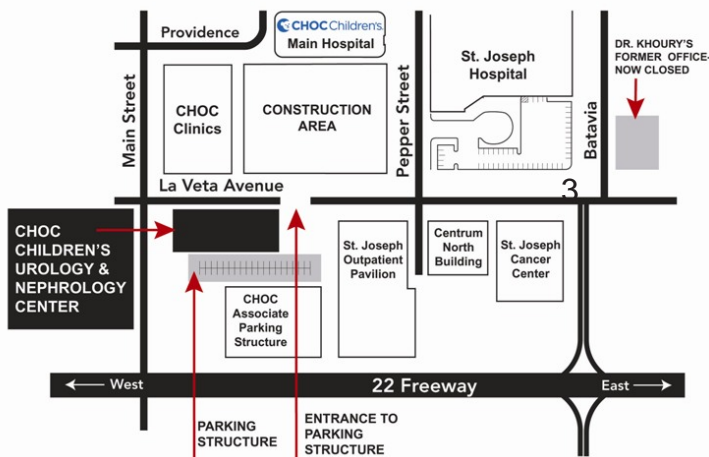
- ❖ State-of-the-art, onsite diagnostic testing including urodynamics, diagnostic ultrasound, flow rate, biofeedback, and bladder scanning for post-void residual (PVR)
- ❖ Comprehensive treatment for pediatric bladder disorders, including neurogenic conditions
- ❖ Evaluation and management of voiding disorders, vesicoureteral reflex, pyelonephritis and urinary tract infections
- ❖ Surgical reconstruction of the urinary tract, including genital abnormalities
- ❖ Surgery for child and adolescent groin conditions
- ❖ The most advanced approach to minimally invasive surgeries, including laparoscopic nephrectomy and orchiopexy, endoscopic procedures and robotic surgeries

CHOC Children's Urology and Nephrology Center is located at the CHOC Commerce Tower, 505 S. Main St., Orange, first floor, Suite 100. Parking is available in the structure adjacent to the CHOC Commerce Tower; the entrance is on La Veta.



For appointments and referrals to see Dr. Tony Khoury, please call:
CHOC Children's Urology and Nephrology Center: 714.512.3919
For Academic Issues: 714.512.3914

www.choc.org



Tony E. Khoury, M.D.
Interim Chairman and Professor of Urology
Chief of Pediatric Urology at UC Irvine
Department of Urology and Children's Hospital of Orange County

Training

Undergraduate:	Ain Shams University, Cairo, Egypt
Medical School:	Ain Shams University Hospital, Cairo, Egypt
Internship:	Scarborough General Hospital, Scarborough, Ontario, Canada
Residency:	University of Toronto, Ontario, Canada
Fellowship Training:	Hospital for Sick Children, Pediatric Urology, Toronto, Ontario, Canada University of Calgary, Research Microbiology, Calgary, Alberta

Dr. Tony Khoury joined the Department of Urology faculty in March 2008 as professor of urology. He serves as chief of pediatric urology at both UC Irvine and at Children's Hospital of Orange County. He completed his residency training at the University of Toronto from 1981-1985 and his fellowship training in pediatric urology at the Hospital for Sick Children in Toronto from 1985-1987 under the mentorship of Dr. B. Churchill. Following his fellowship, he spent a year at the University of Calgary with Dr. Bill Costerton conducting research in the field of infection and biomaterials. This work resulted in several publications and a patent award on the bioelectric mechanism to eliminate bacterial biofilms.

He joined the faculty of the Division of Urology at the Hospital for Sick Children in Toronto in 1988 where he was the division head from 1995-2008. His special interests are in reconstructive surgery of the genitourinary tract, urological malignancies and renal transplantation. He has maintained an active laboratory research effort and has established extensive collaborations nationally and internationally in the fields of infection, biomaterials and regenerative medicine.

Dr. Khoury's research has resulted in more than 200 publications, 33 book chapters, and 250 presentations at national and international meetings. He has delivered 160 lectures as a visiting professor or invited speaker. Dr. Khoury is on the executive boards of several national and international specialty committees, which include the American Academy of Pediatrics Section on Urology and the International Children's Continence Society (ICCS). He has been president of the Society of Pediatric Urologists of Canada and immediate past chairman of the Scientific Council of the Canadian Urological Association's Scholarship Foundation.

Urology is the branch of medicine concerned with the urinary tract in both genders and the genital tract of the reproductive system in males. Nephrology is the branch of medicine concerned with the kidney.

What is the urinary tract?

The urinary tract includes the organ system primarily responsible for cleaning and filtering excess fluid and waste material from the blood. The urinary system is composed of the following:

- ❖ kidneys
- ❖ ureters
- ❖ bladder
- ❖ urethra

The kidneys also function as glands that produce hormones necessary for building red blood cells and regulating blood pressure.

What causes problems in the urinary system?

In children, problems of the urinary system include acute and chronic kidney failure, urinary tract infections, obstructions along the urinary tract, and abnormalities present at birth.

Diseases of the kidneys often produce temporary or permanent changes to the small functional structures and vessels inside the kidney. Frequent urinary tract infections can cause scarring to these structures leading to renal (kidney) failure. Some diseases that cause kidney damage include:

- ❖ glomerulonephritis
- ❖ hemolytic uremic syndrome
- ❖ polycystic kidney disease
- ❖ hydronephrosis
- ❖ urinary tract infections



Disorders of the urinary tract are often related to a blockage that prevents complete emptying of the bladder and often leads to reverse flow of urine. A urinary tract obstruction can cause damage to the urinary tract and kidneys because urine backs up and pools in various areas along the tract. Pooling of urine in the bladder, ureters, or kidneys can lead to infection, scarring and long-term kidney failure. Some disorders that cause obstruction of the urinary tract include:

- ❖ megaureter
- ❖ posterior urethral valves
- ❖ ureterocele or ureteral duplication
- ❖ vesicoureteral reflux
- ❖ neurogenic bladder

Several disorders of the urinary tract only affect males, which are largely related to the male anatomy as well as fetal development. Disorders that affect males may involve the penis, urethra, or testes. Some of the male urogenital disorders include:

- ❖ undescended testes or cryptorchidism
- ❖ hydrocele
- ❖ hypospadias
- ❖ inguinal hernia
- ❖ micropenis
- ❖ testicular torsion



Disorders of the genitourinary system in children are often detected by fetal ultrasound prior to birth. If not detected on fetal ultrasound, often children will develop a urinary tract infection that will prompt your child's physician to perform special diagnostic tests that may detect an abnormality. Some diseases of the kidney do not reveal themselves until later in life or after a child has a bacterial infection or an immune disorder.

For appointments and referrals to see Dr. Tony Khoury, please call:

CHOC Children's Urology and Nephrology Center: 714.512.3919
For Academic Issues: 714.512.3914

Welcome - New Dean of the School of Medicine

We are pleased to inform you that **Dr. Ralph V. Clayman** has accepted the position of dean of the School of Medicine. Dr. Clayman has been serving as the school's interim dean since March 1, 2009, having first come to UC Irvine in 2002 to found the Department of Urology. Prior to that he was professor of surgery and radiology and medical director of the Midwest Stone Institute at the Washington University in St. Louis. There, Dr. Clayman helped pioneer many developments in minimally invasive surgery and for the treatment of strictures affecting the upper urinary tract. These novel procedures have revolutionized the field, making kidney and other urinary tract surgery safer for patients with dramatically improved outcomes. Under his leadership, UC Irvine has become a major center for minimally invasive robotic and laparoscopic surgery, and is home to the first mini-fellowship program for teaching postgraduate urologic surgeons the latest techniques in minimally invasive surgery. A prolific researcher, Dr. Clayman has invented some two dozen urinary tract devices and minimally invasive surgical instruments for use in urologic treatment and care. His work focuses on cryotherapy for treating renal cancer, bioengineering methods for the creation of an artificial bladder, as well as diverse technologies to improve surgical success rates while making these procedures safer and less painful for patients. As dean, Dr. Clayman will provide academic and financial leadership for the School of Medicine, reporting to the chancellor and executive vice chancellor/provost. He will build upon the considerable progress he has already achieved as interim dean, continuing to advance the school's academic and research missions and facilitating collaboration among UC Irvine faculty and administrative leadership. He also will serve as a member of the Academic Council and participate in campuswide policy deliberations. Please join us in welcoming Dr. Clayman to his position as dean. We also express our appreciation to the advisory committee, chaired by Professor Hung Fan, for its contributions to this important appointment.

Chancellor Michael Drake
Executive Vice Chancellor
and Provost
Michael Gottfredson



Ralph V. Clayman, M.D.
Dean, School of Medicine

Greetings from Dr. Clayman

As we embark on a new year, it's time to reflect on the numerous accomplishments we had in 2009.

Much of what we were able to achieve during a year of

tremendous change was due to your dedication, ingenuity and hard work. I want to thank you all for your support and for your continued commitment to our mission, which is to promote biomedical sciences and medicine in Orange County, California, and beyond through excellence in patient care, research, education and community service. In short: Discover. Teach. Heal.

When I became interim dean in March 2009, I saw great potential in our ability to grow and elevate the School of Medicine to a position among the top-ranking medical schools in the country. Months later, my perspective and dedication to this goal remain unchanged. To that end, it is so important for us to work together in order to create an environment that supports the highest standards of patient care and clinical research, as well as the education of our medical students, residents, graduate students and fellows. UC Irvine's School of Medicine is currently on a path that will accelerate its recognition both locally and nationally.

In March 2009, the new UC Irvine Douglas Hospital opened its doors. The hospital has been embraced by the community, and its census has been running well above predictions from day one. We should all be so proud of our new clinical facility, which is among the newest and one of the most technologically advanced hospitals on the West Coast.

Also, in 2009, an affiliation agreement was signed with CHOC Children's Hospital of Orange County alongside a similar agreement with CHOC's pediatric subspecialty faculty. This relationship now provides UC Irvine with a firmly established children's hospital for its faculty and students. While additional work is ongoing to further develop the merging of our faculties and academic endeavors, the end result will be one

of great benefit to the Orange County community and to academic pediatric medicine. The growth of genetic and stem cell research secondary to the CHOC-UC Irvine affiliation should lay the foundation for tremendous strides in both fields. We can all take pride in our robust stem cell research program that has received record-breaking support in funding from the California Institute for Regenerative Medicine and in the new, beautiful Sue and Bill Gross Stem Cell Research Center, which will open in May 2010 to house this critical research. Another wonderful facility that recently opened its doors on our campus is the medical education building. The building provides a state-of-the-art education setting containing the latest in simulation, telemedicine, and tele-teaching technology. This building, along with our dedicated educators, will help to establish UC Irvine as a first-class, premier school for medical education on multiple levels: medical student, graduate student, nursing, postgraduate physician and emergency medical services.

In 2009, UC Irvine was the recipient of many grants that will help advance the medical school's training programs and pursuit of breakthrough medical discoveries. We were awarded \$45 million over five years for infectious disease research from The National Institute of Allergy and Infectious Diseases, a branch of the National Institutes of Health.

In addition, the Program in Geriatrics received a four-year \$2 million grant from the Donald W. Reynolds Foundation to enhance the care of

continued on page 7



continued from page 6

older adults through the integration of geriatric principles throughout the School of Medicine curricula. These are only two examples of our ability to garner recognition and support for our academic and clinical pursuits. UC Irvine School of Medicine is also making an impact in the community. In February 2009, our health sciences students opened a free, weekly clinic that provides vital primary and preventive care for families in need, and in March 2009, the Jeffrey Modell Diagnostic Center for Primary Immunodeficiency opened at Gottschalk Medical Plaza. The center is one of the few locations in the country dedicated specifically to providing diagnosis and care for those individuals born with an immune disorder.

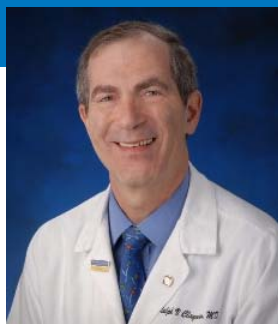
Finally, I am thrilled to share with you that more than 85 UC Irvine Healthcare physicians have earned the distinction of being named Best Doctors in America® in the latest peer-reviewed list compiled by Best Doctors, Inc. Thousands of physicians across the U.S. were asked in a comprehensive survey to identify the most skilled among their peers in more than 400 medical subspecialties. This is by far the greatest number of Best Doctors working in Orange County. There is no question that we have had to overcome some challenging circumstances this year, but I continue to be inspired by your continued dedication to patient care and to our teaching and research programs. This year, we set the course toward success by kicking off our joint strategic planning initiative with UC Irvine Medical Center, and in 2010, we will journey toward a bright, thriving future by exploring our greatest strengths and areas prime for growth and development.

In closing, I want to express my deep appreciation for your support of our campus and for your ongoing dedication and hard work. There will be challenges in the coming year, but I believe that the innovation and resilience of our faculty will prevail, and our progress will continue to be rapid and impressive.

Sincerely,

Ralph V. Clayman, M.D.
Dean, School of Medicine
Professor of Urology

Dr. Clayman honored by the American Urological Association



Ralph V. Clayman, M.D.
Dean, School of Medicine

The Ramon Guiteras Award is the highest honor that the American Urological Association bestows for outstanding contributions to the art and science of urology. This award is named after Ramon Guiteras, M.D., founder and first president of the American Urological Association, and has been awarded annually since 1963. Nominations are solicited from the eight AUA geographic sections and reviewed by an awards committee comprised of AUA officers and past AUA presidents. The 2010 Ramon Guiteras Award winner is **Dr. Ralph V. Clayman** who is being honored for pioneering work in minimally invasive urologic surgery, especially laparoscopic nephrectomy and advancements in the endourologic management of urinary disease.

Newly formed UC Irvine Robotics Steering Committee



Robotic surgery has increased exponentially in every surgical specialty over the last five years. Dr. Ralph Clayman, dean, School of Medicine, has requested a multidisciplinary group of physicians and administrators to form a Robotics Steering Committee. The Department of Urology has been instrumental in creating a robotic surgery program at UC Irvine Medical Center, and therefore, leadership of the committee is under **Dr. Thomas Ahlering** as the chair, with **Dr. Michael Louie** as co-chair. The committee currently has physician representation from urology, OB/GYN (gynecology), colorectal surgery, surgical oncology, bariatric surgery, cardiothoracic surgery, ENT (otolaryngology), and anesthesiology. The dean's mission



Thomas Ahlering, M.D.
Professor and Vice Chair
Department of Urology



Michael Louie, M.D.
Assistant Clinical Professor
Department of Urology

to create the first Center of Excellence for Robotic Surgery in the Western United States. The main objectives in this regard include: the establishment of a physical structure to house the Center of Robotic Oncology; the purchase of a dual-console da Vinci® Si Surgical System, the next generation in robotic surgical technology; the formation of a multidisciplinary surgical and anesthesia team to incorporate robotic surgery as the next step in minimally invasive surgery for patient care; and the creation of an educational and research facility to promote training and innovative research. Additional objectives of the committee include the discussion of credentialing standards and training opportunities for physicians; the development of robotic surgical simulators and virtual reality surgical simulators; and the promotion of robotic surgery through a new website and marketing campaign. With these objectives in mind, the hope is to bring better surgical outcomes to cancer patients at UC Irvine Medical Center through robotic surgery. Some of the improvements already demonstrated by robotic surgery include less blood loss during surgery, fewer blood transfusions, decreased postoperative pain, decreased use of narcotic pain medication, fewer days required for hospitalization, faster recovery to normal activities, and better cosmetic outcomes. The creation of a Center of Excellence for Robotic Surgery will only serve to further UC Irvine Medical Center's goal to: Discover. Teach. Heal.

Dr. Simoneau member of new American Urological Association Committee on Male Health



Anne Simoneau, M.D.
Associate Clinical
Professor of Urology

At its April 2009 meeting, the AUA Board of Directors approved the formation of an ad hoc Committee on Male Health, charged with the mission of promoting "lifelong male health, wellness and disease prevention through the integration of expertise from urology and other specialties." The committee, chaired by Dr. Richard Pelman, will examine the role of male urologic care, exploring the means by which urologic conditions are affected by overall health, and will help establish urologists as reference authorities on male health from neonate to geriatrics. The group will be issuing a survey in early 2010 to members to gather information on perspectives and practice patterns. Survey data will be included in a white paper to be published by the group later in 2010.

For more information about the committee, contact: committeeaffairs@AUAnet.org

American Urological Association Advanced Laparoscopic Robotic Oncology Course January 21-23, 2010

Dr. Thomas Ahlering and **Dr. Elspeth M. McDougall** co-directed this postgraduate, international, continuing medical education course for the American Urological Association. The 27 registrants included postgraduate surgeons from 10 states and 8 countries.

The expert faculty included --
Ralph V. Clayman, M.D.
Atreya Dash, M.D.
Jason Lee, M.D.
Michael K. Louie, M.D.
Phillip Mucksavage, M.D.
David K. Ornstein, M.D.
Donald L. Pick, M.D.
James R. Porter, M.D.
Chandru P. Sundaram, M.D.
Ash Tewari, M.D.
Timothy G. Wilson, M.D.

The modern management of prostate, renal, adrenal and bladder cancers requires a working knowledge of laparoscopic and robotic techniques. In order to perform advanced minimally invasive urology procedures, open surgical principles must be integrated with those of laparoscopy and robotic-assisted laparoscopy. The three-day course featured a full-day concentration on each of the following areas: prostate cancer, bladder cancer, and renal cell cancer. A didactic presentation of step-by-step surgical techniques featured optimal patient positioning, port placement, dissection techniques, and methods to facilitate reconstruction. Three separate surgical procedures were demonstrated by live case surgery broadcasts, with expert faculty providing commentary and offering specific tips and tricks related to each technique. Panel discussions with the expert faculty addressed methods to recognize and resolve complications and problems for each of the three surgical procedures. Attendees were then able to practice these surgical skills in hands-on laboratory sessions for each of the procedures.



Visiting Professorship February 4-6, 2010



Craig A. Peters, M.D.
John E. Cole Professor
of Urology, Division of
Pediatric Urology
University of Virginia
Charlottesville, VA

The Department of Urology was pleased to host visiting professor, **Dr. Craig Peters.**

Dr. Peters provided lectures over three days on topics related to his area of expertise for our department and surrounding community urologists. Also, for the very first time, the Thursday and Friday lectures were broadcast using video conferencing (audio & visual) to the USC Department of Urology. His lecture topics included --

- ❖ Vesicoureteral Reflux in 2010: Shifting Sands
- ❖ Robotic Reconstruction in Pediatric Urology
- ❖ Congenital Obstructive Uropathy: Genes to Robots
- ❖ How I Got Here



In addition, Dr. Peters taught a dedicated, hands-on surgery laboratory session for our eight residents and three USC urology residents, instructing them in the techniques of laparoscopic ureteral reconstruction -- laparoscopic pyeloplasty and ureteral reimplant/Boari flap.

Wave of the future -- portable ultrasound scanners can expedite diagnosis



J. Chris Fox, M.D.

Director, Emergency Ultrasound
UC Irvine Department of Emergency Medicine

Dr. Chris Fox will instruct urology residents in ultrasonographic imaging of the abdomen and scrotum in an office-based setting with standardized patients, providing a comprehensive training format for learning these specialized ultrasound imaging techniques.

It is of paramount importance that urology residents be trained in the art of ultrasound for diagnosis and therapy of the urologic patient. Real-time ultrasound has clear implications in urologic therapeutic procedures, including suprapubic catheter placement, percutaneous drainage of the obstructed kidney, and potentially percutaneous cryotherapy of renal tumors. Urologists who gain the skills to perform ultrasound examinations and interpret the ultrasound images for diagnostic and therapeutic purposes will be able to improve the course of patient care to the advantage of the patient.



Claus G. Roehrborn, M.D.

Department of Urology, Professor and Chairman E.E. Fogelson and Greer Garson Fogelson Distinguished Chair in Urology UT Southwestern Medical Center, Dallas, TX

2010 John W. Posey Visiting Professorship December 9-11, 2010

Dr. Roehrborn will be presenting lectures on management of benign and malignant prostate diseases, including medical and minimally invasive therapies for BPH and markers for prostate cancer.

For course registration, please contact --
Cynthia Shell
Phone: 714.456.5371
E-mail: cshell@uci.edu

Upcoming Events



Postgraduate Training Program for Urologic Surgeons

**20th Anniversary of the Laparoscopic Nephrectomy
Laparoscopic, Robotic and Ablative Therapies for Localized Renal Tumors**

June 25-26, 2010

Hosted by the
UC Irvine School of Medicine
Department of Urology
Location: UC Irvine Medical Center

Course Directors --
Ralph V. Clayman, M.D.
Elspeth M. McDougall, M.D.



Ralph V. Clayman, M.D.

In 1990, Dr. Clayman performed the first laparoscopic nephrectomy.

This training program is designed for postgraduate urologic surgeons to provide them with comprehensive, advanced minimally invasive, cutting edge renal surgery techniques. In addition to practical didactic lectures, extensive case presentations will be featured by the expert faculty along with 8-hours of hands-on, laboratory sessions.

For course registration, please contact --
Cynthia Shell
Phone: 714.456.5371
E-mail: cshell@uci.edu



Friends of the Department of Urology are invited to a special dinner celebrating the 20th anniversary of the first laparoscopic nephrectomy.

Come celebrate the first 20 years of laparoscopic renal surgery

**June 26, 2010
6 p.m.**

Wyndham Orange County Hotel

**To make a dinner reservation, please contact --
Rosanne Santos
Phone: 714.456.8176
E-mail: rtsantos@uci.edu**

Your Urology Spring 2010, Issue 13

The urology newsletter is published biannually. We welcome your comments and ideas for stories. Please send them to Dr. Elspeth McDougall, editor, at cshell@uci.edu. Make sure to let us know if we have permission to reproduce your comment in full or in part in Your Urology. Copyright © 2010 The Regents of the University of California. All rights reserved.

Department Interim Chairman
Antoine E. Khoury, M.D.

Newsletter Editor
Elspeth M. McDougall, M.D., FRCSC, MHPE

Newsletter Coordinator - Cynthia Shell

If you do not want to receive further communications from the Department of Urology, please contact Cynthia Shell.

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Tel: 714.456.5371



UC Irvine School of Medicine, Department of Urology Clinical and Staff Faculty



Ralph V. Clayman, M.D.

Dean, School of Medicine
Professor 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:
714.456.7005



Antoine E. Khoury, M.D.

Professor and Chief of Pediatric Urology
Interim Chairman, Department of Urology

Dr. Khoury is world renowned for his expertise in the medical and surgical management of complex pediatric urology anomalies. His services include reconstructive surgery for incontinence, genital anomalies, renal transplantation and oncology. He did his postgraduate fellowship training in pediatric urology at the Hospital for Sick Children in Toronto, Ontario, Canada.

For appointments and referrals, please call:
CHOC Children's Urology and
Nephrology Center: 714.512.3919
For Academic Issues: 714.512.3914



Thomas E. Ahlering, M.D.

Professor and Vice Chairman

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
9 am - 3:45 pm



Regina M. Hovey, M.D.

HS/Associate Clinical Professor
Director, Urology Residency Program

Dr. Hovey specializes in female urology, urinary incontinence, neurourology, and lower urinary tract reconstruction. She did her postgraduate fellowship training in female urology, neurourology and reconstructive urology at University of California, Davis.

For appointments and referrals, please call:
714.456.7128

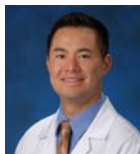


Atreya Dash, M.D.

Assistant Professor of Urology
Chief, Urology Service at the VA Long
Beach Healthcare System

Dr. Dash completed a fellowship in urologic oncology at Memorial Sloan-Kettering Cancer Center in New York. He has experience in all areas of urologic oncology including the advanced surgical treatment of prostate, renal, testis and bladder cancers. His patient treatment modalities include minimally invasive surgical technologies such as laparoscopy to improve the care and convalescence of patients with urologic cancers.

For appointments and referrals, please call:
714.456.7005



Michael Louie, M.D.

HS/Assistant Clinical Professor

Dr. Louie specializes in enlargement of the prostate (BPH), the treatment of kidney stones, kidney cancer, strictures of the ureter and robotic-assisted prostatectomy. He completed his fellowship training in robotic and laparoscopic minimally invasive surgery at University of California, Irvine.

For appointments and referrals, please call:
714.456.7005



Leland Ronningen, M.D.

HS/Associate Clinical Professor

Dr. Ronningen practices general urology primarily at the Long Beach Veteran's Hospital with special interest in benign diseases of the prostate and urologic care of spinal cord injury/disability patients. He received his urology training at Letterman Army Medical Center, Presidio of San Francisco and at the Portsmouth Naval Hospital in Portsmouth, Virginia.



Elspeth M. McDougall, M.D.

Professor of Urology and Director,
UC Irvine Surgical Education Center

Dr. McDougall specializes in minimally invasive surgery for the treatment of kidney stones, kidney cancer and strictures of the ureter. She did her postgraduate fellowship training in endourology and extracorporeal shock wave lithotripsy at Washington University Medical School, Barnes Hospital, St. Louis, Missouri.

For appointments and referrals, please call:
714.456.7005



Anne R. Simoneau, M.D.

HS/Associate Clinical Professor
Assistant Director, Urological Oncology

Dr. Simoneau has clinical trials in prostate cancer prevention and is collaborating with Dr. Zi on research in bladder cancer prevention. She did her postgraduate fellowship training in urological oncology at the University of Southern California.

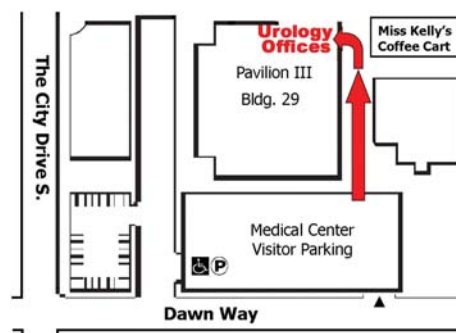


Aaron Spitz, M.D.

Staff Physician
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 UC Irvine Medical Center --

From I-5 take the Chapman Avenue exit. Drive westbound on Chapman. Turn left (south) onto The City Drive South. Proceed to Dawn Way. Turn left. The UC Irvine Medical Center visitor parking structure is on the left side. Upon exiting the parking structure after parking, 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.