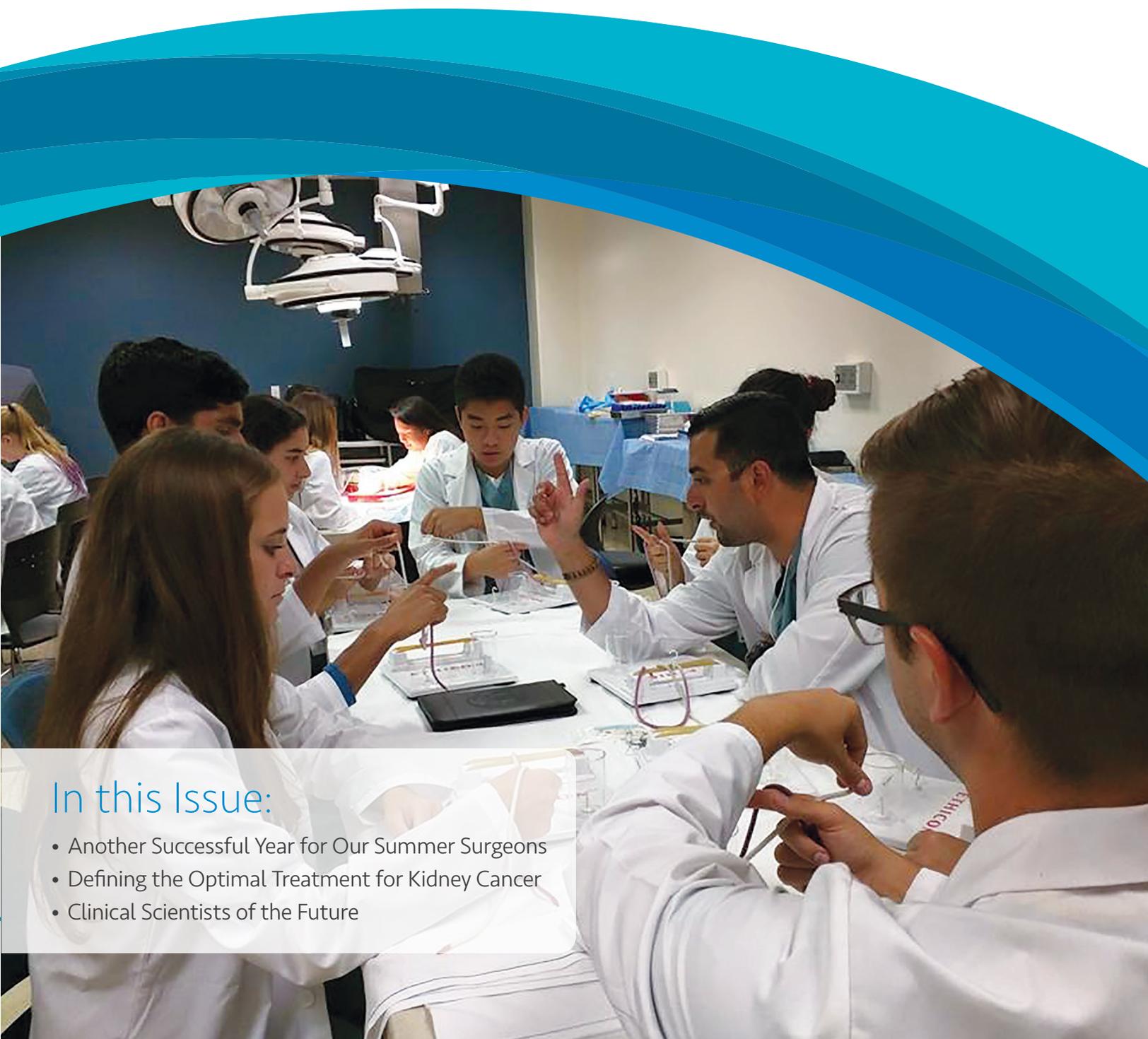




# Department of Urology

DISCOVER. TEACH. HEAL.  
[www.urology.uci.edu](http://www.urology.uci.edu) | [ucirvinehealth.org](http://ucirvinehealth.org)



## In this Issue:

- Another Successful Year for Our Summer Surgeons
- Defining the Optimal Treatment for Kidney Cancer
- Clinical Scientists of the Future

# Message from the Chair



Dear colleagues and friends,

At UC Irvine Health, our tripartite mission is summarized in the statement *Discover. Teach. Heal*. These three components are inseparable as we continue on our journey to become one of the finest schools of medicine in the country. In this issue of our newsletter, we have elected to highlight the *Teach* aspect of the Department of Urology.

Teaching generates insightful questions that lead to research discoveries and new treatments. Also, it ensures the progress of medicine as our students learn both the “tried-and-true” and “latest and greatest”, in a forum that encourages them to challenge the status quo.

Along with the academic curriculum, students learn implicit lessons in professionalism and communication. We endeavor to teach our students, residents and fellows not only to cure the disease, but also to heal the patient and help him or her return to a healthy lifestyle. A wonderful byproduct of our teaching mission is the assurance that we are always surrounded by eager,

intelligent and youthful individuals. These future physicians and urologists work diligently, at great personal sacrifice, to learn all aspects of medicine and surgery. Their keen interest refreshes and reinvigorates us, and their learning spirit helps us to never lose sight of the importance of the work we do and its impact on the community.

With resident graduation, the on-boarding of new interns, residents and fellows, and our high school summer surgery program gathering national and international participants, this is the perfect time to reflect on our educational mission. This quarterly newsletter will touch on each of these milestones, as they truly exemplify our department’s goal of creating inquiring and innovative minds in all who come to us to discover, teach and heal.

Thank you,

A handwritten signature in black ink that reads "Jaime Landman". The signature is fluid and cursive.

Jaime Landman, MD  
Chair, UC Irvine Health Department of Urology

## Services Offered by the Department of Urology

At UC Irvine Health Center for Urologic Care, we offer expert, comprehensive care for:

- General urology services
- Male infertility
- Reconstructive urology
- Kidney stones and kidney disease
- Male urology
- Pediatric urology
- Urologic cancers
- Female urology

# Another Successful Year for Our Summer Surgeons

This summer marked the UC Irvine Health Department of Urology's 4th Annual Summer Surgery Program. Each year, the department runs two, two-week sessions for motivated and academically driven high school students who are interested in gaining hands-on experience in surgery and medicine. To date, we have successfully graduated over 150 summer surgeons through our program.

Dr. Jaime Landman launched the Summer Surgery Program in 2012. His mission was to create a program that dove deeper into medical education and focused on providing students with experiences that no other program in the country could offer.

Our summer surgeons are exposed to live observation of surgical cases at UC Irvine Medical Center, ultrasound simulation and hands-on training with our state-of-the-art laparoscopic surgical equipment, including the intuitive da Vinci Surgical System®. Also, they receive professional coaching with performing endoscopic procedures and participate in anatomy and physiology courses. Students are granted access to UC Irvine School of Medicine's Medical Education Simulation Center where they become BLS certified, and learn intubation, IV placement, lumbar puncture procedures and trauma simulation. By the end of the program, they develop proficient skills in suturing, surgical knot-tying and dissection procedures.

The program positively impacts the alumni's outlook and perspective on medical education. The hope is that this experience solidifies their decision to pursue a life of innovative thinking, and opens the door to make a difference in the future of healthcare delivery.

For more information about Outreach & Education Programs, visit [www.urology.uci.edu](http://www.urology.uci.edu)



## Graduating Residents

### Message from Residency Director Mark L. Jordan, MD

The UC Irvine Urology Residency Program continues to recruit and prepare the physicians of tomorrow. The five-year program is fully accredited by the ACGME and is extremely competitive, typically attracting more than 200 outstanding medical student applicants, with two vacancies per year.

This year, we were proud to graduate Drs. Rachel Meuleners and Surendra Kolla, who will be entering practice in Wisconsin and Kansas, respectively. Residents receive outstanding surgical training and have the opportunity to participate in several visiting professorship programs per year. Also they serve on several important hospital committees relating to quality of care and education. The program also offers an outstanding clinical skills laboratory focusing on laparoscopy and robotics. Interviews will be conducted with qualified applicants Nov. 2 and 3, 2015, in what will hopefully be another successful recruitment season!

# Defining the Optimal Treatment for Kidney Cancer

UC Irvine Health research shows that traditional treatment may not be the best treatment.

The ideal treatment for small kidney cancers has yet to be defined. Historically, these cancers were treated by removing the entire kidney. More recently, however, it has been discovered that removing the entire kidney may have serious adverse effects, specifically an increased rate of death from cardiovascular disease.

Because of this, many of today's leading urologists—including physicians at UC Irvine Health—focus on removing just the cancer, also known as a partial nephrectomy, and spare the rest of the kidney.

In a partial nephrectomy, the entire tumor is excised, while the non-cancerous portion of the kidney remains in place. This approach is traditionally performed by open surgery via a large incision, but UC Irvine Health urologists use laparoscopic and robotic minimally invasive surgery to achieve the same outcome. The result is a very small incision and a more rapid recovery for our patients.

Another option used to treat the cancerous area only and preserve the rest of the kidney is to kill the cancer cells by freezing them. This method uses one to three small freezing needles that are guided into the



Jaime Landman, MD performs a kidney biopsy

tumor under X-ray control. Results are favorable but some studies suggest that the outcome with partial nephrectomy is better.

Recently, using the country's largest cancer database, our researchers teamed up with the UC Irvine Health Department of Epidemiology to try to define the optimal treatment for kidney cancers that are less than 3 cm.

The team—led by urologist Dr. Ralph Clayman and epidemiologist Dr. Hoda Anton-Culver—performed a population-based analysis of more than 17,000 small renal cancers and found that overall survival for patients treated with partial nephrectomy is better than for those who had a radical nephrectomy, regardless of age, tumor grade and other factors for all renal cancers up to 3 cm in size.

They further learned that for tumors 2 cm or smaller, both partial nephrectomy and needle-based thermal ablation offered excellent results. However, for tumors between 2.1 to 3 cm, partial nephrectomy performed better than needle-based thermal ablation.

Urologists at UC Irvine Health are pioneers in laparoscopic and robot assisted partial nephrectomy, and are at the forefront of needle-based cryoablation. These treatments continue to be the first resort for our patients with a small renal tumor. To be sure, the kidney sparing approach to the small renal cancer provides for superior longevity compared to removing the cancer and kidney together.

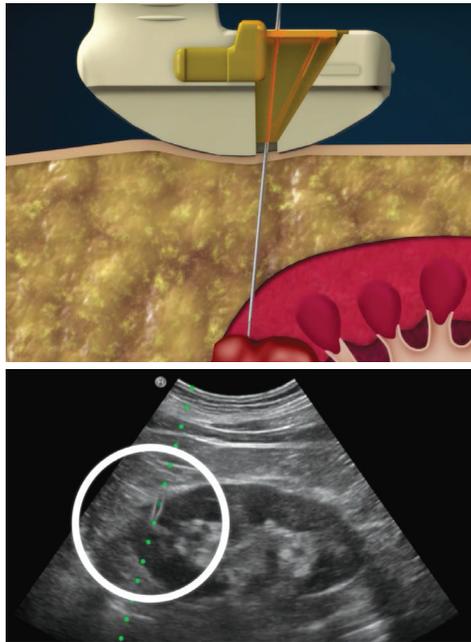
# Philanthropy Spotlight

The faculty physicians of the UC Irvine Health Department of Urology are dedicated to advancing the diagnosis and treatment of the entire spectrum of urologic conditions.

Our team delivers the highest level of expert clinical care. We develop new technologies, educate the next generation of urologists, and enhance the urologic health of people worldwide. Many minimally invasive techniques currently in clinical use were developed by the UC Irvine Health Urology team. Our care community is dedicated to creating a better future for patients with urologic diseases by developing the novel treatments of tomorrow.

With your help, we can turn discoveries into therapies that improve the lives of people throughout our community and beyond. When you give to the UC Irvine Health Department of Urology, you enable our faculty to pursue innovative ideas and educate tomorrow's medical leaders. We ask you to help us create a better future, and join the Urology team.

**For a confidential conversation about how you can make a difference, please contact Gloria Crockett at [gcrocket@uci.edu](mailto:gcrocket@uci.edu)**



Lastly, it is important to note that all renal tumors are not cancers. At UC Irvine Health, Dr. Jaime Landman has pioneered the practice of performing biopsies on all renal masses prior to any surgery. In this manner, more than 20 percent of our patients have been spared any surgery, as we learned that their tumor was indeed not cancerous. For more information on this approach, contact us at 714-456-7005.

By: Dena Moskowitz, MD and Ralph Clayman, MD

## Our department is thankful for the recent grants we have received:

Merck Company awarded Xiaolin Zi, MD, PhD, for Phase-I trial of Pembrolizumab and Percutaneous Cryoablation Combination Followed by Nephron-Sparing Surgery or Cytoreductive Nephrectomy in Locally Advanced and Metastatic Renal Cell Carcinomas.

American Urological Association awarded scholar Kyle Spradling and mentors Jaime Landman, MD, and Ramy Yaacoub, MD, for Prognostic Value of Molecular Biomarkers in the Mammalian Target of Rapamycin (mTOR) Pathway for Different Histopathological Types of Bladder Cancer.

UC Irvine School of Medicine Committee on Research and Graduate Programs awarded Kara Babaian, MD, for A Multigene Test For Indolent Prostate Cancer.

## Clinical Scientists of the Future

As interest continues to grow in evidence-based medicine, comparative effectiveness research and the science of quality assessment and improvement, our urology department has had the privilege of training two resident interns who have successfully completed their Master of Science degree in Biomedical and Translation Science (MS-BATS).

*“The research these bright individuals conducted is a great manifestation of the Discover and Teach part of our mission,” said Jaime Landman, MD, chair to the Department of Urology. “It has truly been an honor to train the clinical scientists of the future.”*

Garen Abedi, MD, is a physician who completed his bachelor’s, master’s, and medical degrees at UC Irvine. His MS-BATS clinical research focused on the comparison of radiation dose and image quality between triple bolus CT and conventional CT urography protocols. The study used a retrospective database of patients who had undergone CT imaging for renal cortical neoplasm management.

In this retrospective study, we found that radiation dose in a particular computed tomography dose index (CTDIvol) and dose length product (DLP) were 28-40 percent lower for the triple bolus CT patients, depending on how the radiation dose was measured. For the triple bolus CT protocol, the study found that as patients’ BMI increased, the radiation dose incurred remained relatively stable.\*

“Without intensive research training, such as what MS-BATS program is providing, researchers will not be able to compete in clinical research. We are happy to have had a number of trainees go through the program, performing research on important clinical topics in urology,” said Sherrie Kaplan, PhD, assistant vice chancellor for the Department of Medicine.

\*Abedi G, Okhunov Z, Lall C, et al. Comparison of radiation dose from conventional and triple-bolus computed tomography urography protocols in the diagnosis and management of patients with renal cortical neoplasms. *Urology* 2014; 84: 875-80.



# Fellowship Programs & Courses Offered

The Department of Urology offers the following Urologic Fellowship Programs:

- Pediatric Urology Surgery Fellowship (ACGME)
- Reconstructive Surgery Fellowship
- Female Pelvic Medicine and Reconstructive Surgery Fellowship Program (ACGME)
- Minimally Invasive Urologic Surgery: Advanced Training Program

To learn more, visit [www.urology.uci.edu](http://www.urology.uci.edu)

## Practical PCNL: From Access to Exit

Small group PCNL learning with intensive lab time hosted by the American Urological Association.

**Irvine, CA**  
**Nov. 14-15, 2015**

### REGISTER TODAY!

Please visit [AUAnet.org/PCNL](http://AUAnet.org/PCNL) for detailed program information and registration.

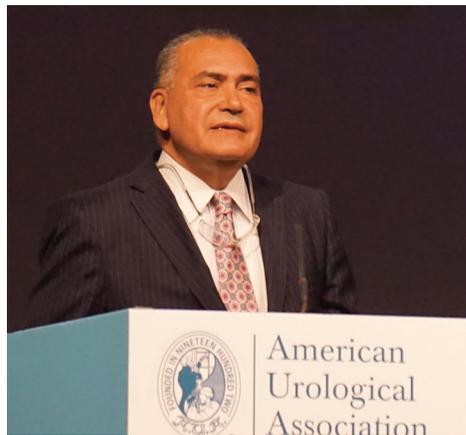
## AUA Annual Meeting Highlights

### ➤ Renal Tumor Biopsy: The Friendly Debate Continues!

Dr. Jaime Landman, chair of the Department of Urology and Dr. Bradley Leibovich, chair of the Mayo Clinic Department of Urology, addressed preoperative renal biopsy, one of the most important topics in the management of renal cortical neoplasms. Both experts shed light on the role of renal mass biopsy in the contemporary management of renal cortical neoplasms.



### ➤ Take Home Messages: Female Urology, Incontinence and Urodynamics



Gamal Ghoniem, MD, senior faculty at the Department of Urology, was selected to present the Take Home Messages at this year's AUA meeting. Ghoniem summarized the presentations on topics related to overactive bladder, neurogenic voiding dysfunction, mesh and female urology, pelvic organ prolapse, impaired bladder contractility and underactive bladder.



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please contact our business development  
officer Rachel Hogue at 714-292-9716.**

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Additional information can be found on our academic website at [www.urology.uci.edu](http://www.urology.uci.edu)

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