Through Education and Mentorship, UCLA Urology Builds on Its Legacy

From an outsider’s perspective, a leading university urology program such as UCLA’s is most often associated with outstanding patient care and research. But within UCLA Urology, the education and training of medical students, interns, residents, and fellows is as important as any aspect of the department’s mission.

“We are just as devoted to excellence in education as we are to ensuring the best clinical outcomes for our patients,” says Dr. Jennifer Singer, a UCLA Urology clinical professor and the department’s inaugural Peter Starrett Chair in Medical Education. “It’s the trainees, after all, who serve as our legacy after their training has been completed, when they take care of their own patients and prepare future urologists themselves.”

UCLA Urology residents go through comprehensive training in all aspects of urology and in a wide variety of settings, including at UCLA’s Westwood and Santa Monica hospitals and in UCLA-affiliated L.A. County facilities and the West Los Angeles VA Medical Center. In addition to clinical training in state-of-the-art urological techniques and evidence-based care, residents devote the entire fourth year of the six-year program to research under the tutelage of one or more UCLA Urology faculty mentors. Fellowship programs bring in those who have completed residency for advanced training in one of six areas: andrology;
The goals of our educational program are to be comprehensive, progressive, and innovative,” Dr. Singer explains. She notes that the department’s systematic approach to education incorporates both traditional and innovative new ways of teaching, in many cases enabled by advances in technology — including surgical simulation programs analogous to the training of airline pilots.

“As teachers and mentors, we need to understand that our trainees learn differently than we did and incorporate new teaching and learning techniques,” says Dr. Victor Nitti, UCLA Urology professor and director of the fellowship program in female pelvic medicine and reconstructive surgery. “In addition, with medical information now doubling approximately every 18 months, it’s no longer possible to know everything. Our trainees need to know how to access information and become master adaptive learners rather than medical encyclopedias.”

The department’s training programs are not only preparing the next generation of urology leaders, but also advancing the field. An example is the endourology fellowship, which teaches procedures that now constitute a majority of the technical responsibilities required of most urologists, notes Dr. Matthew Dunn, UCLA Urology associate clinical professor and director of the endourology fellowship program. “Learning good technique early on during residency is paramount in establishing the building blocks for a successful career,” Dr. Dunn says. “The endourology fellowship takes it one step further to teach complex, advanced minimally invasive techniques while always testing and developing the latest technology to improve care.”

Dr. Leonard Marks, UCLA Urology professor and holder of the Jean B. deKernion Chair in Urology, heads a unique fellowship in the contemporary management of prostate cancer, which imparts advanced knowledge in imaging, targeted biopsy, and focal therapy as part of a full urologic oncology training program. “Multidisciplinary collaboration, possible only at a place like UCLA, has enriched the educational value of the program,” Dr. Marks says. “As a result, the takeaway knowledge provided to our trainees has led to discoveries in Westwood being brought to many other locales across the U.S., and even to other countries.”

All of the fellowship programs are driven by mentorship — in which senior faculty, whose own careers benefited from the generosity of the individuals who trained them, pass along their knowledge and skills to trainees who will one day become mentors themselves. “Mentorship is not only critical to the success of men’s urologic health training, but also what makes my career most satisfying,” says Dr. Jesse Mills, UCLA Urology associate professor and director of the men’s urologic health fellowship program, which each year trains two fellows in male infertility, hormone replacement, and sexual dysfunction, as well as precepting a second-year medical student. “While the draw of patient care and excellent outcomes launches me out of bed every morning, it’s the training of the next generation that makes each day that much more rewarding.”

UCLA Urology’s residency program is unusual in having trainees devote their entire fourth year to learning and conducting research. “By teaching our residents to become skilled basic, clinical, translational, or population scientists, we ensure that our graduates are among the urologists who are driving the field in terms of innovation,
technology, and defining best clinical practices and evidence-based medicine,” says Dr. Isla Garraway, a UCLA Urology associate professor who, as the department’s director of research, oversees the residents’ research education.

Dr. Garraway, who also teaches residents who rotate through the West Los Angeles VA Medical Center, where she is based, points out that UCLA Urology’s robust teaching environment benefits faculty as well as trainees. “Because the residents are exposed to other teachers, they bring what they’ve learned to what I am teaching them, and I learn from that exchange of information as well,” she says. “For all of us in medicine, it’s essential to continuously learn as the field moves forward.”

“Our trainees elevate all of us through their outstanding research and amazing insights,” adds Dr. Singer. “We learn from each other, and in the process of becoming better teachers, it makes us better clinicians.”

Under the leadership of Dr. Mark S. Litwin, UCLA Urology chair, the department has placed a high priority on attracting philanthropic support for its educational mission. Dr. Singer notes that the chair endowed by Peter Starrett, which she currently holds, allows her to spend dedicated time promoting the department’s educational programs. These efforts — including everything from robotic modules for training urologic surgeons to the travel of residents and fellows to professional meetings where they can present their research and learn from other presenters — also require philanthropic support.

“Growing, strengthening, and broadening our educational programs comes with costs,” Dr. Singer says.

As far back as her own training, Dr. Singer knew she wanted education to play an important role in her career. “So many people taught me in ways that I continue to benefit from today,” she says. “It’s incredibly rewarding to be able to pass that knowledge down to our trainees, motivate them and see that spark in their eyes when they’re learning something for the first time, and watch their progress from the beginning of the program through completion.”
Dr. Ganesh S. Palapattu uses his platform as chair of the University of Michigan’s Department of Urology to make sure trainees never lose sight of the human element in their work.

“I always say that we treat patients, not diseases,” Dr. Palapattu explains. “In the same way, we train doctors, not technicians. We train people who have complicated lives. And we’re all in this together — patients, peers, trainees, and staff. Everyone.”

Dr. Palapattu, a urologic oncologist whose clinical practice has focused on treating patients with prostate and kidney cancer, and who has a translational research laboratory centered on prostate cancer, was appointed department chair in March 2019. He heads a robust urology program that is currently celebrating its centennial. The University of Michigan has a long history of training urology leaders — one of its earliest trainees, Dr. Charles Huggins, was one of two urologists to win a Nobel Prize.

Medical education continues to be a vital component of his department’s mission, Dr. Palapattu notes. Under the leadership of the urology residency program director, Dr. Kate Kraft, the department is introducing new ways of measuring trainee surgical autonomy in the operating room to facilitate better real-time feedback and improve competencies. In addition, innovative programs have been instituted to promote trainee wellness and to motivate scholarly work. “We are fortunate to have a residency program with a legacy of impact,” Dr. Palapattu says. “We are committed to coming up with new and better ways of ensuring an outstanding trainee experience. This necessarily involves optimizing clinical research and educational opportunities for our residents.”

In these and other efforts, Dr. Palapattu is guided by his own experience as a UCLA Urology resident. “At UCLA I learned the power of inspiration and the impact faculty could have on trainees, as well as the impact trainees could have on each other,” he says. “I learned that faculty could be mentors, and profoundly influence a trainee’s career trajectory, even if they weren’t in the trainee’s chosen discipline. By modeling professionalism and the behavior of a good surgeon, good doctor, and good person, all of my mentors at UCLA served as tremendous role models. When I was at UCLA, I always felt that people cared about me, and that made a big difference. I’ve tried to put those lessons into practice here at Michigan.”

When Maggy Simon first met Dr. Nishant Patel, UCLA Urology assistant professor and an expert in stone disease and treatment, she was terrified at what he might find on an X-ray.

“I said to Dr. Patel, if you tell me I have more stones, just take me out and shoot me because I’m not going to live through that again,” she recalls.

Ms. Simon and her husband, Jack, were in the California desert city of Indian Wells when, on December 28, 2018, Ms. Simon began to experience excruciating pain. Upon arriving at the hospital emergency room, She was told the pain was a result of a stone. It would be two more days until the stone passed, and another two days until Ms. Simon was stable enough to drive to Los Angeles with her husband to see Dr. Patel.

The X-ray showed that, in fact, Ms. Simon had three more stones. But Dr. Patel was reassuring, telling the Simons that he could use extracorporeal shock wave lithotripsy to noninvasively break up the stones into tiny pieces that could easily pass through the urinary tract. The procedure was a success, and ever since, Ms. Simon has felt fine, closely adhering to the diet Dr. Patel prescribed to reduce the risk of recurrence while staying well hydrated.

This wasn’t the first positive experience the Simons had with UCLA Urology. Several years ago, Jack Simon met Dr. Mark S. Litwin, UCLA Urology chair, when he was hospitalized and successfully treated for bleeding in his prostate. The Simons began supporting the department after that, and this year they made a legacy gift that will facilitate collaborations in training and research that lead to innovations to enhance patient care.

After running her own business-management practice for many years, Ms. Simon began a successful career as a cabaret singer, winning over audiences with her high-energy jazz and pop renditions, along with her engaging Broadway sensibility. After a year that started with a health scare, she is thrilled to again be feeling like herself. “I am so fortunate to have been in the hands of great doctors,” she says. “Our gift is intended to allow more people to experience the same fortune.”
A recent opinion piece in the *New York Times* made a powerful case for why clinician-scientists — physicians who divide their time between seeing patients and investigating new and better ways to diagnose, treat, and prevent the conditions that afflict them — are more important than ever to the health and well-being of our society. As the authors noted, the unique perspective that comes from interacting with and treating patients, then applying that experience in the research setting, has led to countless advances that have changed the course of medicine.

At UCLA Urology, training the next generation of outstanding clinicians is central to our mission. Part of our goal in this educational effort is to prepare individuals who will provide compassionate, state-of-the-art urologic care. But beyond that, we aim to cultivate thinkers and scholars who will use their clinical insights to produce new knowledge that advances the state of the art. As this issue of our newsletter illustrates, we do this through education that is equally focused on developing trainees’ research and critical-thinking skills as it is on teaching them the surgical techniques and communication skills that are integral to high-quality patient care.

Unfortunately, as the aforementioned article pointed out, government and foundation funding to support such training have declined at an inopportune time — when an aging population portends a growing need to improve the care we provide for chronic illnesses and disabilities, and as we enter a new era of precision medicine that will only enhance the importance of physician-scientists. As a result, we increasingly rely on the generosity of our philanthropic supporters to ensure that we continue to provide our trainees with the best possible educational experience.

The impact of our department’s educational mission cannot be overstated; I believe it is what sets us apart.

❖ Mark S. Litwin, MD, MPH  
Professor and Chair, UCLA Urology
Fourth-Year Residents Focus on Research

At the halfway point in their training, UCLA Urology residents step away from the clinics and operating rooms to spend a year conducting research. Far removed from the fast-paced world of patient care, they can be found learning under the tutelage of their faculty mentors and helping to advance the science and evidence base for patient care. Following are the paths chosen by UCLA Urology’s 2019-20 fourth-year residents:

For Dr. Ryan Chuang, the research year affords the opportunity to work with Dr. Leonard Marks, UCLA Urology professor and an internationally renowned expert in prostate MRI, active surveillance, and focal therapies for prostate cancer. Dr. Chuang is investigating the role of prostate MRI in the diagnosis of prostate cancer, and what to do with the results. His primary project will focus on a clinical trial for an emerging prostate cancer treatment known as focal laser ablation. “This is a prostate cancer treatment that can be performed within the clinic under fairly minimal sedation, not requiring either an anesthesiologist to be present or an inpatient stay,” Dr. Chuang says. “That would be a game-changer.”

Dr. Chuang says that when he was applying for residency programs, the vast majority didn’t include a year dedicated to research. “This was one of the reasons I chose UCLA,” he says. “As someone interested in academic medicine, the research year is extremely valuable to me. For all urology residents, it provides a chance to not only get involved in basic-science or applied-science research, but also to develop what we want in our career.”

Dr. Patrick Lec is studying a very different problem. “The enormous impact of liberal opioid prescribing on public health-related outcomes has challenged physicians’ approach to pain management,” says Dr. Lec. “Further complicating the equation is a growing body of evidence suggesting that opioids can influence cancer behavior and spur tumor formation.”

Working in the lab of Dr. Karim Chamie, UCLA Urology associate professor, Dr. Lec is spending his research year exploring opioids’ effects on urothelial cell carcinoma, a type of cancer that occurs in the urinary system. His group has taken a multipronged approach, determining opioid receptor expression in thousands of bladder cancer specimens while developing an in vitro bladder cancer model to assess the changes brought on by opioids in living cells. “Our preliminary results are compelling and will be further evaluated in a mouse model and, potentially, a human clinical trial,” Dr. Lec says.

Dr. Neil Mendhiratta is spending his research year under the co-mentorship of Dr. Brian Shuch, associate professor of urology and the Henry Alvin and Carrie L. Meinhardt Chair for Kidney Cancer Research, and Dr. Paul Boutros, professor of human genetics and director of cancer data science at the UCLA Jonsson Comprehensive Cancer Center. Dr. Mendhiratta’s research is focused on improving the ability to characterize kidney tumors using genomic and transcriptomic techniques — specifically, by investigating ways to better identify benign kidney tumors that often mimic cancer, and therefore lead many patients to undergo invasive surgery unnecessarily.

“By improving our ability to determine the aggressiveness of renal masses, we can help patients and providers make the best treatment decisions and avoid both overtreatment of benign disease and undertreatment of malignant tumors,” Dr. Mendhiratta explains. “Understanding the genomic landscape of kidney cancer is essential to providing the best possible care for our patients. Collaborations such as ours between clinicians and data scientists are instrumental in advancing our understanding of kidney cancer and providing the opportunity to develop individualized treatment options for our patients.”

Dr. Erika Wood is devoting the fourth year of her UCLA Urology residency to clinical research, with a focus on patient outcomes and qualitative inquiry; Dr. Wood’s primary mentor is Dr. Jeffrey Veale, UCLA Urology associate professor and director of the UCLA Kidney Exchange Program, along with Dr. Sheba George, an adjunct associate professor in the UCLA Fielding School of Public Health with expertise in qualitative methodology and analysis. For their primary project, they are collaborating with Stanford to investigate the impact of immunosuppression on quality of life among standard versus dual hematopoietic stem cell/kidney transplant recipients. In three centers across the United States, trials have been conducted demonstrating the feasibility and safety of dual hematopoietic stem cell and kidney transplantation — in which recipients receive both stem cells and a kidney from their donor — leading to more than 70% of patients being able to wean off of their immunosuppression. “Imunosuppression has many long-term health consequences,” Dr. Wood notes. “The aim of our qualitative study is to understand if and how patients’ quality of life is improved in the absence of immunosuppression, using in-depth interviews.”

Like all of the UCLA Urology fourth-year residents, Dr. Wood believes her research experience will ultimately contribute to her being a better urologist. “I am passionate about identifying priorities in health research by engaging patients,” she says. “Involving patients at every stage of research is important for ensuring clinically meaningful and applicable results that impact patient care. I hope to use the skills I garner this year to continue contributing to patient-centered research in urology.”
Optimizing Sexual Health After Prostate Cancer

Significant advances have occurred over the last several decades in the ways prostate cancer is diagnosed and treated. Techniques involving magnetic resonance imaging (MRI), targeted biopsies, and personalized testing — some of which have been pioneered at UCLA — have improved the accuracy of diagnosis, allowing more men with non-aggressive tumors to choose active surveillance over treatment. For those who do need treatment, nerve-sparing and robotic-assisted laparoscopic surgery, along with newer techniques such as focal therapy (targeting the tumor with laser ablation), have reduced side effects and the pain and recovery time associated with surgery, as have more precise methods of radiation treatment.

These developments have led to better cancer outcomes, allowing men diagnosed with prostate cancer to live longer. Equally important, they have enhanced quality of life. Historically, prostate cancer treatment has evoked fear of lifelong erectile dysfunction. But sexual function outcomes have improved with these treatment advances.

UCLA Urology has gone a step further in optimizing sexual health among men treated for prostate cancer by implementing a new, proactive protocol. The personalized program combines penile “pre-hab” and “rehab” and takes a team approach: One doctor focuses on achieving the best cancer-control result possible, while another is devoted to optimizing sexual function. Men are empowered to take ownership of all facets of their health as they undergo prostate cancer treatment and move forward with their lives. This pioneering program has proven to be highly effective: In a study published in the International Journal of Impotence Research (IJIR), men who enrolled in the combined “pre-hab and rehab” program were twice as likely to experience recovery of erectile function within the first year after prostatectomy as peers who were not in the program.

The new protocol is led by UCLA Urology’s Dr. Jesse Mills at The Men’s Clinic at UCLA in Santa Monica. Patients on the Westside of Los Angeles can also be seen at the Frank Clark Urology Clinic in Westwood. Dr. Sriram Eleswarapu, a UCLA Urology surgeon-scientist specializing in male reproductive and sexual medicine (and, with Dr. Mills, a co-author on the IJIR study), now offers the program at the Burbank and Santa Clarita locations of The Men’s Clinic. He is working closely with UCLA Urology robotic surgery expert Dr. Nicholas Donin to ensure that men near these locations have a team of fellowship-trained specialists in prostate and sexual health close to home.

For more information, visit www.uclaurology.com. To make an appointment, call (310) 794-7700.

Kymora Scotland, MD, PhD

Dr. Scotland, an accomplished clinician, surgeon, and scientist, has joined UCLA Urology as an assistant professor, where her principal academic focus will be to establish a basic and translational science research program addressing smooth muscle physiology, stone pathogenesis, and the urinary microbiome. Dr. Scotland’s clinical work focuses on the endourologic management of patients with kidney stones, upper-tract urothelial cancer, and benign prostatic hyperplasia. She also has a special clinical interest in global urology. As a scientist, she focuses on stent-associated infection, ureteral aperistalsis, urinary stone pathogenesis, and the impact of the urinary microbiome. Dr. Scotland earned her undergraduate degree from Hunter College, her MD from Weill Cornell, and her pharmacology doctorate from the Tri-Institutional Cornell/Rockefeller/Sloan Kettering Program. She completed her urology residency training at Thomas Jefferson University and her endourology fellowship at the University of British Columbia.
The Men’s Clinic at UCLA

DID YOU KNOW?

Low testosterone can be caused by a variety of factors. At The Men’s Clinic at UCLA, men with “low T” undergo a robust physical exam and endocrine testing to design a treatment plan.

The Men’s Clinic at UCLA is a comprehensive, multidisciplinary health and wellness center located in Santa Monica, now with locations in Burbank and Santa Clarita. For more information or to make an appointment, call (310) 794-7700.

Contributions to UCLA Urology support our research programs and help our faculty make the cutting-edge discoveries that can save lives. You can make a gift to UCLA Urology by logging on to http://giving.ucla.edu/urology. Please call (310) 794-4746 if you have any questions about making a gift to UCLA Urology.