



Department of Urology

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Sacral Nerve Stimulation Changes Woman's Life

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Message from the Chair



Dear friends and colleagues,

At UC Irvine Health Department of Urology, we strive to provide the best of research, medical education and clinical care to every patient who comes through our doors. We have been recently recognized for our efforts in a number of ways. Last month, four of our urologists were named Physicians of Excellence by the Orange County Medical Association, a branch of the California Medical Association. This recognition is equal parts humbling and inspiring, and we are grateful to be listed among physicians who represent the best medical care Orange County has to offer.

Additionally, our department had its best showing ever at the American Urological Association annual meeting. This prestigious meeting is the largest gathering of urologists in the world. The UC Irvine Health urology team presented 22 original research projects, our faculty hosted or participated in three courses, and they also presented on the plenary session podium on three separate occasions. I am delighted that we had the privilege to share our novel research and ideas on this global platform and hope it engenders discussion among our peers. Learn more about our team's AUA presentations on page 6.

For our team, the ability to heal goes beyond what we learned in medical school. We are continually seeking ways to provide better care and improve lives of people. Page 3 focuses on hypospadias—a rare condition that affects baby boys—and how our urologist Dr. Elias Wehbi has achieved great success in treating the condition. On page 7, we examine the latest research findings on how a diabetes drug may be effective in treating bladder cancer. UC Irvine professor of urology, Xiaolin Zi, PhD, collaborated with colleagues from New York University and McGill University on this promising research study.

Our cover story for this issue features patient Andrea Baugh Lindsey, who suffered from debilitating urinary and fecal incontinence for more than a decade before coming to UC Irvine Health for life-changing treatment. Read page 5 to learn more about Lindsey's journey to recovery and how female urologist Dr. Gamal Ghoniem changed her life.

We hope you enjoy reading this latest issue of the UC Irvine Health Department of Urology newsletter.

A handwritten signature in black ink that reads "Jaime Landman". The signature is fluid and cursive, written in a professional style.

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

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

Female Urology

Gamal Ghoniem, MD
Judy Choi, MD

General Urology Services

Ross Moskowitz, MD

Kidney Stones & Kidney Disease

Jaime Landman, MD
Ralph Clayman, MD
Ramy Yaacoub, MD

Male Infertility

Aaron Spitz, MD

Male Urology

Joel Gelman, MD

Pediatric Urology

Antoine Khoury, MD
Elias Wehbi, MD
Irene McAleer, MD

Reconstructive Urology

Gamal Ghoniem, MD
Joel Gelman, MD
Judy Choi, MD

Urologic Cancers

Edward Uchio, MD
Kara Babaian, MD
Mark Jordan, MD
Thomas Ahlering, MD

Treating Hypospadias: Getting it Right the First Time



Little is routine about correcting hypospadias, a birth defect in a boy's urethra. That's why Dr. Elias Wehbi, a UC Irvine Health pediatric urologist, doesn't have a standard procedure for fixing the abnormality. Each case has to be considered individually to minimize problems later on in life.

That personalized approach allows Wehbi to treat his patients—mostly infants—“with a greater than 95 percent chance of success without complications,” he said. Elsewhere in California, the complication rates can be 30 percent or higher.

In baby boys with the condition, the urethra, through which the body eliminates urine, fails to extend the full length of the penis. The opening, normally at the tip of the penis, is somewhere along the bottom,

anywhere from near the tip to nearly at the base. A downward curvature of the penis often goes along with the condition. According to the U.S. Centers for Disease Control and Prevention, hypospadias affects 5 in 1,000 boys. It can result in abnormal spraying during urination, and if left untreated, difficulty later in life with sexual intercourse in more severe cases.

Surgery to treat hypospadias generally involves the delicate task of using a flap of penile skin to create the tube that will extend the urethra to the tip.

Cosmetic considerations are another concern. In correcting a downward curve, one challenge is that there is more skin on the top of the penis than the bottom. “Many surgeons even this out by shortening the skin on top with sutures,” Wehbi said.

It's easier and faster, but it is less likely to last and provide the most aesthetic results. Wehbi undertakes the more difficult task of lengthening the bottom by placing a graft or using a flap or tissue from elsewhere on the penis.

Most surgeons have a standard way of correcting hypospadias, Wehbi said, and he often sees the negative effects when he's called on to correct bad results. Wehbi prefers to personalize his treatment plan and surgical methods to each child's needs, to avoid further corrective procedures in the future.



Dr. Elias Wehbi, Assistant Clinical Professor,
Department of Urology

Making a Difference: It's in the DNA of a Genetic Testing Company Founder

In the early days of Ambry Genetics, founder Charles Dunlop literally lived at the company, working long hours to pioneer a genetic test for cystic fibrosis. Success, he hoped, would increase understanding of the condition and improve lives.

Today, Ambry's genetic testing panel extends well beyond cystic fibrosis, including hereditary cancer, heart and neurological conditions, lung disease and general genetics. In its short history, the company has provided results for over half a million patient samples. You might think Dunlop's profile would be among them. But, until recently, you would have been wrong.

Two years ago, Dunlop learned he had stage IV prostate cancer. The man who made his career helping others anticipate disease was caught by surprise. Only after the diagnosis did he test his own blood, revealing that he had a genetic mutation for cancer.

The disease led Dunlop to Dr. Thomas Ahlering, UC Irvine Health Department of Urology vice chair and prostate surgeon. Like the Ambry Genetics chairman and president, Ahlering is on a quest to understand human disease. For him, the target is much more specific. He spends his nights and weekends poring over surgery data, looking for ways to improve the lives of prostate cancer survivors.

"Why do I toil over papers? To answer that, you have to ask another question: How do I tear myself away from the work? When you know you're making a difference in patients' lives you think, 'The more I do, maybe I can make the surgical outcomes better'" Ahlering said.



Dr. Thomas Ahlering, vice chair, Department of Urology and Charles Dunlop, president and chairman, Ambry Genetics.

The passion for unlocking the secrets to disease, coupled with gratitude for the care he received at UC Irvine Health, prompted Dunlop and his wife, Leddy, to make a generous gift to the Department of Urology. Their contribution will help make life better for those who follow in the battle against urologic disease and cancer.

Dunlop teamed with Ahlering—whom he refers to as the best surgeon in the world—and Dr. John Fruehauf, a UC Irvine Health specialist in medical oncology, to develop a treatment strategy to defeat his own cancer.

"Today, the cancer is gone. And, I'm thankful that Tom and John saved me," he said.

The passion for unlocking the secrets to disease, coupled with gratitude for the care he received at UC Irvine Health, prompted Dunlop and his wife, Leddy, to make

a generous gift to the Department of Urology. Their contribution will help make life better for those who follow in the battle against urologic disease and cancer.

"If I can make a difference by guiding money toward an effort like the work of this small, competent group," Dunlop said, "then it makes the world a better place, in my view."

Sacral Nerve Stimulation Changes Woman's Life

Andrea Baugh Lindsey is a brand new woman. The 49-year-old Yucaipa, Calif., resident loves to spend time with her young grandchildren and participates in most of their activities. But until she sought care from a UC Irvine Health urologist, her life was completely different.

For more than a decade, Lindsey dreaded leaving her home because she suffered from urinary and fecal incontinence. Her condition would not allow her to wait more than 15 minutes to go to the bathroom.

"If I felt I had to go while driving, I literally had to stop and go on the side of the road," Lindsey said. "I had to carry rolls of toilet paper with me and a change of clothes, just in case. Trips to Disneyland with my grandchildren made me anxious because my frequent trips to the restroom interfered with their ride times. It was embarrassing."

Lindsey's troubles started in her 30s, when she began suffering from urinary incontinence from childbearing. A partial hysterectomy worsened her condition. Doctors inserted a transvaginal mesh, a net-like material used as a sling to support the pelvic organs. Instead of solving her problems, though, the mesh caused further complications. Her health issues forced the former Orange County telecommunications executive to leave her career of 27 years. She and her husband—who retired early from his police work to care for her—moved to their Arizona river home.

Then at Thanksgiving dinner with family one year, Lindsey became painfully bloated and was taken to the emergency room.

Doctors discovered that the mesh sling had eroded tissue throughout the pelvic area. That particular sling later became the subject of extensive litigation, which led to a warning from the U.S. Food and Drug Administration about erosion and infection problems.

Lindsey had numerous surgeries to repair the damage and insert a different sling, as well as collagen, to build up urethral tissue.

None of the procedures resolved or even significantly improved her situation, Lindsey said. While recovering from additional surgery, she suffered a stroke that worsened her condition, as her brain lost control over her bladder and bowel function.

With very little hope, Lindsey embarked on an Internet search to find a top-notch specialist who could help improve her condition. That's how she came across Dr. Gamal Ghoniem, vice chair of UC Irvine Health Department of Urology. He specializes in female urology, pelvic reconstructive surgery and voiding dysfunction. Ghoniem still remembers Lindsey's first visit.

"Her social life was destroyed," Ghoniem recalls. "She was at the end of her rope, embarrassed and emotionally distraught." Ghoniem suggested a different treatment: implanting a small device in the lower back to stimulate the sacral nerve, which controls the bowel and bladder.

Lindsey was told she would see as much as 50 percent improvement in her incontinence. Instead, she has found that the device, inserted in 2013, has made her at least 80 percent better. She and her

husband moved from Arizona to Yucaipa to be near family, and closer to Ghoniem for continued treatment.

"After years of failed attempts to improve my condition, I'm finally confident in the care I'm receiving. I'm happy to share my story, so that other women with similar problems will know there are solutions. You don't have to suffer in silence," said Lindsey. "I look forward to going to Disneyland with my grandchildren and spending more time with them. Dr. Ghoniem made me human again."



Patient Andrea Baugh Lindsey's life improved dramatically after receiving treatment from Dr. Gamal Ghoniem.

▶ The Department of Urology Takes Home the Jackson Hole Award

This year, against impressive competition, Dr. Jaime Landman, chair of the Department of Urology, and his research team won 2nd place at the Ralph E. Hopkins Jackson Hole Urology Seminar. This event is a competition in which five expert academic urologists from different subspecialties give a series of lectures on the current state of urology. They are judged on the quality of their research and lectures and their ability to respond to an expert critique panel regarding the subject of their presentations.

▶ Donor Appreciation Ceremony and Wall Unveiling

The Department of Urology held its inaugural Donor Appreciation Ceremony in February at its academic offices in Orange, Calif. The event honored generous supporters who have donated \$25,000 or more to the department. The faculty shared how these gifts have translated into the latest innovations in education, research and urologic care. Philanthropist Jerry Choate received the first platinum award in recognition of his recent \$1.5 million gift for tissue engineering. At the ceremony, the department proudly unveiled a donor wall that recognizes supporters at the platinum \$1 million+, gold \$250,000+, silver \$50,000+, and bronze \$20,000+ levels. For more information about the donor wall, or to discuss giving opportunities, please contact Jenny Tom at tomjc@uci.edu or 714-456-8124.

▶ UC Irvine Health Faculty Attend AUA Annual Meeting

UC Irvine Health Department of Urology proudly participated in The American Urological Association Annual Meeting, from May 6-11. The meeting, held in San Diego, Calif., brought together 10,000 urologists from around the world to present and exchange ideas and innovations relevant to their field. Urologists from UC Irvine Health participated in 22 presentations, including podium, moderated and non-moderated posters. Dr. Ralph Clayman, professor of urology, presented a plenary session on a new technique for endoscopic-guided percutaneous nephrolithotomy, which was developed at UC Irvine Health. Dr. Jaime Landman, chair of the Department of Urology, directed an education course on comprehensive management of T1a renal cell carcinoma. Additionally, he participated in a plenary session on stratifying care for the small renal masses, and Dr. Thomas Ahlering conducted a plenary debate on complications of robot-assisted radical prostatectomy.

Dr. Moskowitz Receives Top UC Irvine Health Award

The Department of Urology is proud to congratulate Dr. Ross Moskowitz for winning the ARI²SE award for excellence. Each year, UC Irvine Health recognizes an outstanding faculty or staff member for each of its ARI²SE values: Accountability, Respect, Integrity, Innovation, Service and Excellence. These values guide our behaviors and enable us to provide world-class care. The ARI²SE award is a well-deserved accomplishment for Moskowitz, who embodies excellence in clinical care and serves as an example to his colleagues. Congratulations!



Ross Moskowitz, MD,
Assistant Clinical
Professor,
Department of Urology

Congratulations to Our Graduating Resident

Dr. Dena Moskowitz will be graduating from her urology residency in June 2016. She will enroll in a two-year fellowship in female and pelvic medicine in Virginia Mason Medical Center in Seattle.



Urology resident
Dena Moskowitz

New Residents Join the Department of Urology

The Department of Urology welcomes two new residents: Dr. Justin La and Dr. Peter Chamarian. They will join us on July 1, 2016, for their urology residency training.

The Department of Urology hosted a guest speaker and a visiting professor earlier this year. A special thanks to Dr. Sharon Ross and Dr. Timothy Boone for sharing their time and expertise with us.

Guest Speaker Dr. Sharon Ross, Feb. 22-23



Sharon Ross, PhD, National Institutes of Health cancer program director, was our special guest speaker for a combined grand rounds lecture with the UC Irvine Health Department of Urology and the Division of Nephrology. Ross lectured on the molecular approaches to obesity, diet and cancer prevention and NIH funding opportunities. The following day, she provided a similar talk geared to basic scientists and cancer researchers at the UC Irvine campus.

Visiting Professor Dr. Boone Brief, March 2-5



We were pleased to have Timothy Boone, MD, PhD, co-director of the Institute for Academic Medicine, professor and chair of the Department of Urology at Houston Methodist Hospital, as our visiting professor. He provided four lectures and a half-day of hands-on surgical training course to faculty, fellows and residents. During the surgical training course, residents and faculty learned about pelvic anatomy, artificial urinary sphincter placement technique, male sling technique and augmentation cystoplasty.

Congratulations to Our Physicians of Excellence!

The following physicians have been recently recognized by the Orange County Medical Association (OCMA), a branch of the California Medical Association. OCMA acknowledges these physicians for their services to their profession, lifelong dedication to their patients and commitment to the community they serve:

Joel Gelman, MD
Gamal Ghoniem, MD

Jaime Landman, MD
Ross Moskowitz, MD

Diabetes Drug May Be Effective against Bladder Cancer

The accumulation of a high concentration of the common diabetes drug metformin in urine shows promise in inhibiting the growth of bladder cancer tumors, according to findings published in *Molecular Cancer Therapeutics*, a journal of the American Association of Cancer Research.

Led by Xiaolin Zi, PhD, a professor of urology at UC Irvine Health and colleagues from UC Irvine, New York University and McGill University, the study examined whether metformin treatment in mouse models of bladder cancer demonstrated anti-tumor activity.

“Bladder cancer is a major public health challenge, as the treatment cost per patient from diagnosis to death is among the highest of all cancers in the U.S.,” said Zi. “Developing a safe, convenient, low-cost drug that can be taken orally for the prevention and treatment of disease recurrence is a clear priority in urologic oncology.”

Superficial bladder cancer is the most common cancer of the bladder and urinary tract. Despite current treatments such as transurethral resection and intravesicular BCG or mitomycin C, it is associated with high risk of recurrence and/or progression to invasive and metastatic disease. Many of the current chemotherapeutic regimens carry significant side effects and toxicities.

“We believe our findings justify carefully designed clinical trials to determine whether high concentration oral doses of metformin in early bladder cancer might be effective,” Zi said.



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Our department is growing and we are actively recruiting faculty. If you are interested, visit our recruit website at <https://recruit.ap.uci.edu/apply>

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