Xiaolin Zi, PhD, Receives Prestigious NCI Funds for Prostate Cancer Research

In this Issue:
- Patient Spotlight: Life after Prostate Cancer
- Taking Action against Overactive Bladder
- Meet Four New Department of Urology Faculty Members
Our goal at the UC Irvine Health Department of Urology is to help our community be healthier than it was yesterday. Our research, education and clinical efforts seek to advance medicine and the way we treat the entire spectrum of urologic disorders. We are devising new technologies and innovative techniques that allow us to make more accurate assessments and provide personalized medicine to our patients. We are training the urologists of the future so that, in addition to employing the skills that we teach them, they can also develop a passion for innovation that transforms people’s lives. And we are always looking at ways to improve the care we provide to the people who trust us with their lives.

To that end, we are proud to announce that the National Cancer Institute has granted a five-year, $1.77 million Research Project (R01) Award to fund research for the prevention and treatment of prostate cancer. This research will be led by Xiaolin Zi, PhD, director of urological research and professor of urology and pharmacology at UC Irvine Health. In this issue, Dr. Zi explains what this important research hopes to accomplish (page 6).

Also, we are excited to announce that the department recently recruited four new physicians (page 7) who will help expand our services in Orange County and the Inland Empire region. We are delighted to welcome our newest faculty members, M. Leon Seard, II, MD, Michael K. Louie, MD, Kai-Wen Chuang, MD, and Faysal A. Yafi, MD. They are all urologists of the highest caliber and we look forward to working alongside them.

Also in this issue, we follow up with Trevor Mackay, a patient who was diagnosed with prostate cancer and has been cancer-free for six years thanks to the expertise of Dr. Thomas Ahlering, director of UC Irvine Health Robotic Oncology Center, and the care of our Urology team.

I hope you enjoy reading the latest issue of our Department of Urology newsletter.

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**
- Judy Choi, MD
- Gamal Ghoniem, MD

**General Urology Services**
- Michael K. Louie, MD
- M. Leon Seard, II, MD

**Kidney Stones & Kidney Disease**
- Ralph Clayman, MD
- Jaime Landman, MD
- Ramy Yaacoub, MD

**Men’s Health**
- Faysal Yafi, MD

**Pediatric Urology**
- Kai-Wen Chuang, MD
- Irene McAleer, MD
- Antoine Khoury, MD
- Elias Wehbi, MD

**Reconstructive Urology**
- Judy Choi, MD
- Joel Gelman, MD
- Gamal Ghoniem, MD

**Urologic Cancers**
- Thomas Ahlering, MD
- Mark Jordan, MD
- Edward Uchio, MD
Women Have Many Options for Treating Pelvic Organ Prolapse

About 200,000 women in the United States undergo surgery for pelvic organ prolapse each year, but many others with the condition don’t want an operation. And that’s usually just fine, says Dr. Judy M. Choi, a UC Irvine Health specialist in female urology.

“Prolapse is mainly a quality-of-life issue,” Choi said. “There are very few times it really affects your health or is dangerous.”

That means women often have many options — including just watching and waiting. Choi wants to make sure her patients understand the possibilities.

Vaginal prolapse occurs, usually at some point after childbearing as women age, when vaginal muscles have been stretched or weakened to the point where they no longer can hold the surrounding pelvic organs in place. One of the organs — bladder, rectum, uterus — then might herniate into the vagina, where the wall is weakened.

Symptoms include feeling a bulge in the vagina, constipation, or difficulty emptying the bladder. But often, Choi says, there are no symptoms.

Depending on the symptoms and the patient’s concerns, a woman might choose to do nothing, or to start pelvic floor physical therapy to build the pelvic floor muscles. A pessary — a ring similar to a large diaphragm — can be inserted in the vagina to help hold the organs up and in place.

Surgery can be performed either robotically through the abdomen, or vaginally, and both are considered low-risk. “I prefer to do it vaginally,” Choi said. “It’s easier to recover from and leaves no external scars.” When performed vaginally, the procedure generally involves tightening loose vaginal tissue, and reinforcing the vaginal tissues to some of the stronger connective tissue in the pelvis.

When performed abdominally, mesh may be used for extra support.

Some women feel a sense of shame about prolapse, Choi said, and yet it is believed to be very common. About 3.3 million women in the U.S. are estimated to be affected, and by age 80, 11 percent of all women will have had surgical intervention. But there could be many more women with the condition, Choi said, because it is often under-recognized; diagnosis isn’t easy and often requires specialization in female urology. “Prolapse doesn’t get enough exposure,” she said.

Judy Choi, MD,
Assistant Clinical Professor of Urology
Dr. Choi is an expert in urinary incontinence, vaginal and uterine prolapse, neurogenic bladder, voiding dysfunction, and pelvic reconstruction.

UC Irvine Health Pediatric Urology ranked 22nd in the nation

U.S. News and World Report has recognized the UC Irvine Health Pediatric Urology program as No. 22 in the nation. Led by UC Irvine Health physicians, the program at CHOC Children’s was ranked for its care of serious urological conditions. The score reflects data such as infections from urinary catheters, nurse staffing and patient volume, along with nominations from peer physicians.

Arabic Community Outreach

The UC Irvine Health Department of Urology is making strides in providing urologic education and patient services to the local Arabic communities. Heading this initiative is Ramy Yaacoub, MD, assistant clinical professor, who recently did an interview with a Los Angeles-based Arabic television channel. During the interview, Yaacoub addressed the surgical, medical, and dietary interventions for stone disease. Several of our UC Irvine Health urologists speak fluent Arabic and are accepting new patients.

Urology Students Receive Honors in Research

The Department of Urology congratulates Linda Huynh, Susan Li, Nobel Nguyen, and Kenneth Schmitt for achieving honors through UC Irvine’s School of Biological Sciences Excellence in Research Program. Each year, high-achieving undergraduates are given the opportunity to conduct an independent research project for consideration to the program. Successful applicants present their findings at UC Irvine’s annual Undergraduate Research Symposium, with the hope of being published in the Journal of Undergraduate Research. This award is a well-deserved accomplishment for our students. Congratulations!
Taking Action against Overactive Bladder

Eating spicy food or drinking coffee can stimulate a sudden and unstoppable need to urinate for someone who has overactive bladder or OAB. This loss of bladder control can lead to lifestyle changes that range from sleep loss to daily activities that are planned to be near restrooms.

Medical research holds promise for insights that might ultimately improve millions of lives. At least, that’s the way Magdi Abdul Latif Jameel, a luxury real estate developer, sees it. Jameel, whose family is affected by OAB, supports the translational research of Gamal Ghoniem, MD, FACS, UC Irvine Health professor and vice chair of the Department of Urology.

“When a loved one suffers from a chronic condition like OAB and you have the means to donate to an academic center like UC Irvine Health, your gift can benefit many patients. That’s the idea — to benefit others,” said Jameel.

Philanthropic support helps Ghoniem offer patients a customized and systematic approach to treating overactive bladder problems. It also advances his research, which ranges from studies of basic anatomy and mapping of the bladder nerve to novel detection of the pelvic nerve with magnetic resonance imaging and clinical trials for new medications.

“No other doctor ever proposed doing this OAB research to me. Dr. Ghoniem’s research addresses the specific problem and he has an interest in it. That’s why I donated to UC Irvine Health,” said Jameel. “Millions suffer from OAB. I hope his work will ultimately improve the quality of life for many people.”

Last spring, Ghoniem was awarded a patent for a device that interrupts pelvic nerve activity, offering hope to those who do not respond to other treatments. The device, and method of use, is the latest in a long list of innovations from Ghoniem.

Over the years, he has improved and introduced such diagnostic and surgical techniques as intrinsic sphincter deficiency classification, vaginal pack test, suburethral sling, Genisphere injection, bladder neck wrap, male sling, and trans obturator technique. Along the way, he has been aided by patients and family members who shared his passion for making life better for patients with incontinence issues.

“It has become extremely difficult to get funding to explore new ideas and novel techniques for treatment,” said Ghoniem. “Donations like Mr. Jameel’s can help us make leaps in our understanding of overactive bladder and how to treat it,” said Ghoniem.

Gamal Ghoniem, MD, Professor and Vice Chair, Dept. of Urology

Support the Department of Urology the “tax wise” way

Reduce your 2016 tax liability through a gift supporting the UC Irvine Health Department of Urology.

With a gift of appreciated stock your gift will bypass capital gains tax erosion and the resulting charitable deduction may significantly reduce your tax liability.

If you are 70.5 or older, consider the charitable IRA rollover:
• Rollover amount may be excluded from your ordinary taxable income
• Rollover of up to $100,000 per person each year
• Disbursements may qualify as your required minimum distribution

For more information, contact Michele Palma at 714-456-7127 or palmam1@uci.edu
Life after Prostate Cancer

Trevor Mackay consulted three major medical centers in Southern California before deciding where to seek treatment for prostate cancer.

The Manhattan Beach engineer had been thrown into a tailspin by his diagnosis. He was only 49 when he was diagnosed at the end of 2009, a triathlete and Pilates enthusiast who’d never been seriously ill. But his blood tests had been showing increasing PSA levels, a possible marker of prostate cancer, and his doctor grew concerned. “I knew nothing about cancer, nothing about prostates,” Mackay said. “All of a sudden, I had this thing growing inside me that wanted to kill me. It was depressing.”

The best antidote to shock and depression, he decided, was education. He learned as much as he could about his condition and consulted with various specialists before choosing UC Irvine Health. He was impressed by the team approach to prostate cancer testing and treatment.

“The first person I met was the administrative assistant Lydia Cruz-Reyes. She was amazing,” Mackay said. Cruz-Reyes ensured that tests and consultations happened smoothly and with a minimum of worry. “And everybody who came up to me knew who I was, and said ‘Hi, Trevor,’ and explained their role. You felt there was a coordinated effort.”

Most important: He didn’t feel alone.

In Mackay’s case, the cancer was aggressive. Watching and waiting wasn’t an option; his choice was between radiation treatment and surgery.

He chose robotic surgery with Dr. Thomas E. Ahlering, a specialist in urologic surgery who has performed more than 1,200 robotic prostatectomies.

Mackay woke up the next morning with surprisingly little pain, he said, and was discharged later that day. The next day, he strolled to a nearby restaurant; the day after that, he walked a mile and a half. There was a little incontinence that disappeared in a matter of weeks; sexual function took longer, almost two years exactly, he said.

Cancer-free for six years, Mackay is far from being that overwhelmed patient — not that he thinks everyone should follow his exact footsteps or would have the same experience. The main lesson, he said, is for patients to learn about their own options, consult with the medical staff who inspire confidence in them — and realize that they are not alone.
NCI Award Funds New and Smart Drugs to Target Prostate Cancer

The National Cancer Institute (NCI) has awarded a five-year, $1.77 million Research Project (R01) Award to fund research into novel neddylation inhibitors for prevention and treatment of prostate cancer.

The research will be led by Xiaolin Zi, PhD, director of urological research and professor of urology and pharmacology at UC Irvine Health Department of Urology. He will work in collaboration with Dr. Hui Zhang, a molecular biologist and professor at University of Nevada, Las Vegas, and with UC Irvine’s James S. Nowick, PhD, professor of chemistry, and Dan Mercola, MD, PhD, professor of pathology.

A prostate cancer diagnosis is different for every patient. Early or late detection determines the severity of the disease and treatment course. Early-stage prostate cancer is typically treated by a combination of active surveillance (closely monitoring for disease progression), radiation therapy and radical prostatectomy (surgical removal of the prostate). Late-stage prostate cancer generally requires a more aggressive approach with hormone therapy and chemotherapy.

Prostate cancer is a highly heterogeneous disease in its clinical presentation due in part to the underlying genomic diversity. The loss of tumor suppressors, such as RB1 and PTEN, is common in prostate cancer. These genetic alterations in prostate cancer cells may then render them vulnerable to the right targeted drug. Zi has developed a remarkably innovative strategy, in which a drug can target the vulnerabilities of the cancer cell, causing it to kill itself.

“The goal of this project is to develop a smart drug for prostate cancer patients with pRb or Pten tumor suppressor gene deficiency. This drug would selectively kill cancer cells and avoid damaging surrounding normal healthy tissues with fewer side effects to the patients,” Zi said.

One in every seven men in the U.S. will be diagnosed with prostate cancer and more than 2 million are living with it.

Prostate cancer is responsible for 3 percent of men’s total deaths and 10 percent of men’s deaths by cancer in the U.S.

From left to right: Andria Denmon, PhD, Victor Pham, graduate student, Xiaolin Zi, PhD, Christopher Blair, graduate student, Noriko Yokoyama, PhD.
The Department of Urology Welcomes:

**M. Leon Seard, II, MD**
M. Leon Seard, II, MD, is a board-certified urologist who was trained at Loma Linda University and University of Southern California. He specializes in general urology and has treated patients on both the east and west coast for almost 25 years. He has returned to Southern California as director of Ambulatory Urologic Services in the Department of Urology.

**Michael K. Louie, MD**
Michael K. Louie, MD, is a board-certified and fellowship trained urologist who specializes in minimally invasive urologic surgery. He completed his fellowship at the UC Irvine under our senior faculty Dr. Ralph V. Clayman. After founding a successful private urology practice, Louie has returned to the Department of Urology as the director of Urology, Inland Empire.

**Kai-Wen Chuang, MD**
Kai-Wen Chuang, MD, has joined us after completing a prestigious and intensive two-year pediatric fellowship at the University of California, San Francisco. Chuang will join our thriving pediatric urology practice that treats patients at CHOC Children’s and Miller’s Children’s Hospital. She is a great asset to our team of nationally regarded pediatric urologists.

**Faysal A. Yafi, MD, FRCSC**
Faysal A. Yafi, MD, comes to us after completing a two-year fellowship in andrology at Tulane University. He is the director of the Men’s Health Program and chief of Andrology. Yafi will be founding our Men’s Health Center in South Orange County, and his skills and talents will be essential in helping men in our community live longer and stronger lives.

---

New Fellows

The UC Irvine Health Department of Urology has extended their fellowship opportunities. Welcome to our new fellows:

**Cristina Palmer, MD**
Female Urology, Voiding Dysfunction and Urogenital Reconstruction Fellowship

**Roshan Patel, MD**
Minimally Invasive Endourology Fellowship

**Kristi Hebert, MD**
Male Reconstructive Urology Fellowship

**Ahmed Ali, MD**
Pediatric Urology
Join Our Team!

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

Contact Us

UC Irvine Center for Urological Care
101 The City Drive South, Pavilion III, Building 29
Orange, CA 92868

UC Irvine Health Urology Administrative Offices
333 City Boulevard West, Suite 2100
Orange, CA 92868

UC Irvine Health — Tustin
1451 Irvine Blvd.
Tustin, CA 92780

UC Irvine Health — Chino Hills
15944 Los Serranos Country Club Drive, Ste 200
Chino Hills, CA 91709

For appointments or referrals, please contact our business development officer Rachel Hogue at 714-292-9716.