

DEPARTMENT OF UROLOGY



THE UNIVERSITY OF ARIZONA
COLLEGE OF MEDICINE TUCSON

Urology

▶ *Volume III*
Summer 2019

▶ MESSAGE FROM THE CHAIR

We have arrived! As of July 2019, after 50 years, the **inaugural Department of Urology** was approved by the Arizona Board of Regents and was announced as the 16th and newest clinical department at the **University of Arizona College of Medicine - Tucson**.



The journey to department has been a process, and I would like to thank Dr. Leigh Neumayer, chair of the Department of Surgery, as well as Dr. Irv Kron, interim dean of the College of Medicine - Tucson, for their faith in and support of our faculty, residents, nurses, and staff to entrust the evolution of Urology from division to department.

As the Department of Urology, our goal is to continue to grow in the **tripartite mission of clinical care, research, and education**. We currently have 26 full-time and adjunct faculty members helping to train our residents; a strong national & international reputation within the American Urological Association, Endourological Society, and Society of Urodynamics, Female Pelvic Medicine & Urogenital Reconstruction. Our PhD in the Department of Urology, Ken Batai, PhD has created a foundation of research and academic investigation upon which we continue to build upon and grow every year. Our collaborations with the **University of Arizona Cancer Center** have fostered a number of clinical trials, including the most recent study examining robotic prostatectomy for oligometastatic prostate cancer, in the setting of standard systemic therapy with or without definitive treatment (robotic surgery / radiation), to treat patients with metastatic prostate cancer. Our residents continue to be accepted to academic fellowship programs with national recognition and stature.

I would like to thank all who helped realize this dream, which has now become a reality. We look forward to the next step in our evolution.

Sincerely,

A handwritten signature in black ink that reads "B. Lee".

Benjamin R. Lee
Chairman (Interim)
Inaugural Department of Urology
University of Arizona College of Medicine - Tucson



Banner University Medical Center Tucson
649 bed new Hospital Tower opened April 22, 2019

MULTIDISCIPLINARY CLINIC FOR RECURRENT KIDNEY STONES

In winter 2018, the **University of Arizona** and **Banner University Medical Center** launched a multidisciplinary clinic for patients with recurrent kidney stones. This clinic allows patients with recurrent kidney stones to receive a comprehensive evaluation from physicians specializing in urology and nephrology as well as consultation with a registered dietician to help optimize prevention of recurring kidney stones.

To celebrate the introduction of the **BUMC Stone Clinic**, a CME dinner took place at the **Westward Look Resort** on **December 14, 2018**. The event was headlined by world-renowned nephrologist **Dr. David Goldfarb**, who shared his expertise in the medical management of kidney stones. The lecture by **Dr. Benjamin Lee**, Chairman of Urology, focused on the surgical treatments for kidney stones; **Dr. David Tzou**, Assistant professor of Urology, discussed aspects and implications of repeated radiation exposure faced by stone patients and outcomes; finally, registered dietician **Katherine Taylor** presented dietary strategies to prevent future kidney stones. The educational quality of the event was rated a resounding 'excellent' by attendees. To make an appointment for the Stone clinic, please call: **(520) 694-4032**.



▼ (from left to right) Dr. Benjamin Lee, Dr. David Goldfarb, and Dr. David Tzou

FIRST SURGERY IN THE NEW ORs



Following the opening of the new **Urology Clinic** (3838 N. Campbell Ave, 3rd floor, Clinic G, Building 2) last year, a beautiful 15,000-sq.ft. facility with state-of-the-art procedure and exam rooms, **Banner – University Medical Center Tucson** opened doors to a beautiful new a 670,000-sq.ft. hospital tower, increasing the number of licensed patient beds from 479 to 649. With an investment of \$446 million to construct the new facility, 20 new operating rooms were added, with an additional two more OR suites to open later in 2019.

Urology performed the first surgery in the new ORs, a robotic partial nephrectomy, a right posterior hilar mass in a patient grateful to have avoided an increased risk of hemodialysis. Our new Department of Urology is excited to partner with you to provide multi-disciplinary care for patients in the new tower. We offer routine surgeries in complex patients and complex surgeries in routine patients.

KIDNEY CANCER DISPARITIES

Dr. Ken Batai recently published a paper in *Clinical Genitourinary Cancer* (2019) describing kidney cancer racial/ethnic health disparities. He and his colleagues in the **Department of Urology** demonstrated an interesting finding that Hispanic and Native Americans with renal cell carcinoma tend to be diagnosed at a younger age than people of other ethnicities, such as caucasians and those of hispanic descent.

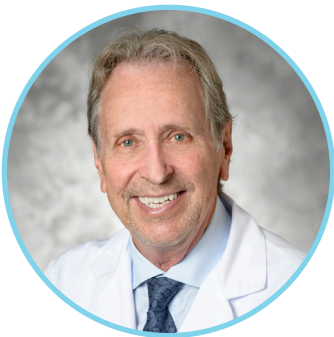
Dr. Batai and his colleagues also published another paper demonstrating a novel finding that two genes (APLP1 & PLPP2) are overexpressed in aggressive and advanced stage clear cell renal cell carcinoma. The expression of these two genes predicts poorer overall survival and a higher death rate among patients with early-stage clear-cell renal cell carcinoma.



Dr. Ken Batai,
Research Assistant Professor

The research team received pilot funding from the **University of Arizona Cancer Center** to further characterize the molecular profile of early-onset and aggressive clear-cell renal cell carcinoma.

GENERAL UROLOGY: MEET DR. ROGER NELLANS!



Dr. Roger Nellans,
Clinical Associate Professor

Dr. Roger Nellans (general urology) focuses on prostate disorders, including elevated PSA, erectile dysfunction, and low testosterone as well as recurrent urinary tract infections and scrotal masses.

A new state-of-the-art prostate ultrasound machine with TRUS-guided biopsy for the diagnosis of prostate cancer is available at our new **Urology Clinic** at **3838 N. Campbell St, 3rd Floor, Clinic G**. With 40+ years of physician experience, our patients receive outstanding diagnostic and therapeutic treatment for their urologic conditions with a network of subspecialty colleagues. We are passionate about educating patients regarding their urological conditions so that they can achieve the highest quality of life.

RADICAL CYSTECTOMY 2019

ERAS PROTOCOL (ENHANCED RECOVERY AFTER SURGERY)

This year has seen significant growth in the management of urologic oncology patients at the **University of Arizona**, thanks to the trust of multiple patients and support of community physicians from Tucson and throughout the state. One of our new initiatives is the implementation of our **Enhanced Recovery After Surgery (ERAS)** program for **radical cystectomy** patients. This standardized perioperative protocol works to ensure that patients receive the highest level of care through the most cost-efficient means available. Our ERAS pathway is unique in that it implements preoperative nutrition and prehabilitation as well as narcotic-sparing management to reduce length of stay and improve patient satisfaction (Figure 1). Future directions include reviewing the economic impact of ERAS on health-care costs.

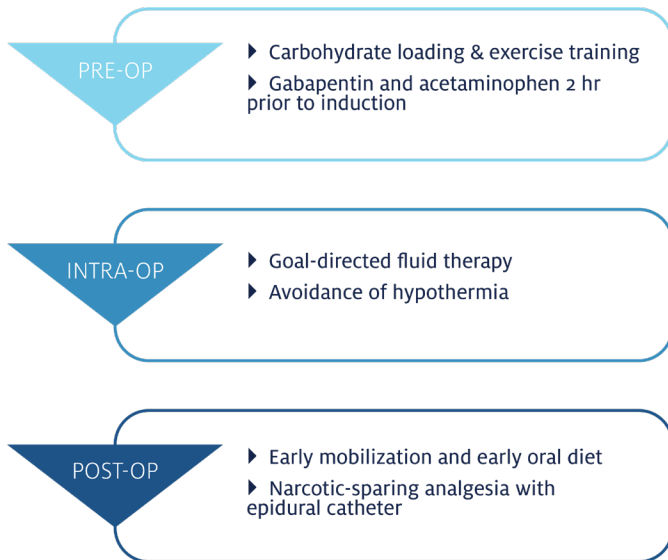


Dr. Juan Chipollini,
Assistant Professor

With sponsorship from the **University of Arizona Cancer Center**, a National Cancer Institute-designated Comprehensive Cancer Center, we have opened several exciting new clinical trials for prostate and bladder cancer patients. One study is the **SWOG1802-Phase III Standard Systemic Therapy With or Without Definitive Treatment in Treating Participants With Metastatic Prostate Cancer**. This study will evaluate whether treatment of the primary tumor can improve survival in patients with M1 prostate cancer versus androgen deprivation therapy alone. Eligible patients are those with evidence of metastatic disease on CT or bone scan within 42 days prior to start of ADT and an intact prostate with no prior radiation or focal treatment (BPH treatment is allowed). Another study is the **SWOG1605-Phase II Atezolizumab in Treating Patients With Recurrent BCG-**

Unresponsive Non-muscle Invasive Bladder Cancer.

This trial will test response of checkpoint inhibitor therapy for high-grade recurrence after BCG intravesical therapy for patients for whom cystectomy was not an option. Eligible patients include those with HGT1 recurrence after induction BCG or HGTa or CIS recurrence after induction BCG and first-round maintenance. With collaboration in these clinical trials, practice-changing evidence and discovery can be achieved. We ask for your support in enrollment and feedback.



In addition, we have ongoing complex oncology management of advanced renal cell carcinoma with IVC thrombus and metastatic testicular cancer using a multidisciplinary team approach tailored to each patient's individual needs. For our superficial bladder cancer patients, we have an IRB-approved protocol to collect data and tissue to help identify biomarkers predictive of disease recurrence and response to treatment. On behalf of our team, we thank you for your ongoing support and look forward to serving the

(figure) BUMC ERAS protocol for radical cystectomy
cancer patients of Arizona while offering them the latest advances in research and clinical care.

GU RECONSTRUCTION

Through translational research and understanding fluid dynamics, we

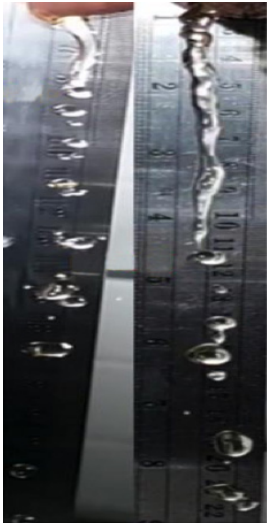
continue to seek new methods to assess **patients requiring complex urethral reconstruction**.

Follow-up in these patients can be challenging, and one of our goals was to develop a **diagnostic tool** to facilitate this process. Recently we developed a non-invasive method to identify and quantitate urethral obstruction, presented at the AUA national meeting. A visual assessment and measurement to indicate presence of obstruction within the urethra was identified in the morphology of a fluid stream and droplet.

As fluid exits an opening, there is a breakpoint from which droplets form. Measuring the length of the stream to this breakpoint has been shown to correlate with the presence of obstruction. Application of this technique to men before and after urethroplasty has confirmed the utility of this diagnostic modality. The picture to the left demonstrates the change in the breakpoint to droplets in a patient before and after urethroplasty. Stay tuned for more information on this exciting new development from **UA Urology**.



Dr. Matthew Gretzer,
Associate Professor



▼ (figure) Urine flow before (left) and after (right) urethroplasty for a 2cm bulbar stricture. Note the change in distance of droplet formation before and after surgery.

MEET OUR NEW INTERNS!



Dr. Kyle Garcia,
Texas Tech University School of Medicine



Dr. Jacob Rust,
USF Health Morsani College of Medicine

FDA BANS SALE & DISTRIBUTION OF VAGINAL MESH PRODUCTS FOR POP

On April 16th, 2019, the FDA ordered the manufacturers of mesh products indicated for **transvaginal repair of pelvic organ prolapse (POP)** to immediately stop selling and distributing these mesh products. This decision was based on the failure of the manufacturers' pre-market applications to provide assurance that the benefits outweighed the risks. It is important to note that the ban only affects transvaginally placed mesh products for POP repair and not mesh products for the treatment of stress incontinence or mesh products placed abdominally or laparoscopically to treat POP.

The FDA further recommended that women who have had mesh products placed for POP, are satisfied with the outcomes, and are not experiencing any complications to continue with their annual exams and follow-up care. There is no need for these women to take additional action at this time. Women

who have had these mesh products placed and are experiencing complications should notify their providers.

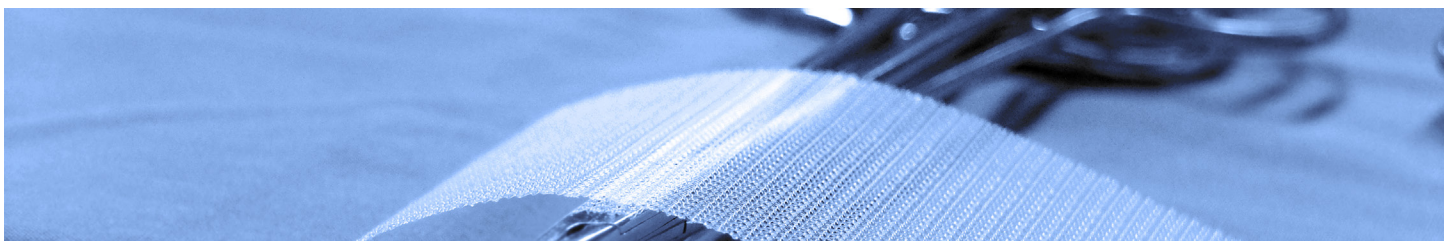


▲
Dr. Christian Twiss,
Associate Professor



Dr. Joel Funk,
Associate Professor

University of Arizona / BUMC providers have not utilized transvaginal mesh to repair POP for years due to the FDA reclassification of these devices as Class III, high-risk devices. **Drs. Christian Twiss and Joel Funk** in the **Department of Urology** at the **University of Arizona** are the only providers in the U.S. who perform the **Autologous Anterior and Apical Pelvic Organ Prolapse Repair (AAA-POP)** to transvaginally repair POP using autologous fascia lata harvested from the patient's thigh. Additionally, they are also the only providers in the U.S. routinely performing robotic sacrocolpopexy with autologous fascia lata to repair pelvic organ prolapse involving the vagina or cervix.





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▶ SCHEDULE AN APPOINTMENT
(520) 694-4032



DEPARTMENT OF UROLOGY 1ST ANNUAL
GOLF BENEFIT FOR THE FIGHT AGAINST
PROSTATE CANCER

Saturday, November 9, 2019

7AM Registration | 8AM Shotgun Start

Sewailo Golf Club

Casino Del Sol

5655 W. Valencia Road
Tucson, AZ 85757

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www.uafoundation.org/urologygolf



UAUrology



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