GENITOURINARY ONCOLOGY PROGRAM COMBINES LEADING-EDGE SCIENCE, RESEARCH AND CARE

The famed writer and anthropologist Zora Neale Hurston once said that “research is formalized curiosity. It is poking and prying with a purpose.”

To UI Urology, a core purpose of ongoing research is to develop and offer treatment patients cannot get elsewhere, giving them hope, healing, and a chance of improved quality of life.

To Michael Abern, M.D., assistant professor and director of urologic oncology, a wide range of research activities, clinical trials, and expertise “enables us to offer new treatments and technologies for genitourinary (GU) cancers that may provide hope when traditional approaches aren’t successful.”

UI Urology’s ongoing oncology research and clinical offerings are extensive, many of them unique to the Chicagoland area. Its patient navigation program (see related story) works with prostate cancer patients and their families to coordinate diagnosis and treatment plans, in ways that increase patient adherence, outcomes, and quality of life.

Its research programs—from establishing screening protocols for prostate cancer and targeting the high-risk populations UI Health serves to a range of studies that lead to more precise diagnoses and treatments across the GU platform—are extensive.

UI Urology has ten ongoing clinical trials for bladder and prostate cancer, renal cell carcinoma, and germ cell tumors (see p. 5) that offer new, even exclusive treatments for patients who come from all over Chicagoland and the Midwest.

All these services are customized in a unique model, a multispecialty tumor board that draws from across UI Health to “review the diagnostics and best treatment plans for GU cancer patients, ensuring excellent team care, collaboration, and communication,” said Daniel Moreira, M.D. assistant professor (see related story).

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2019 UROLOGY GRADUATION

At the end of June, we celebrated Dr. Ryan Dobbs (l) and Dr. Moshe Shapiro (r) as they completed their urology residency program.

Dr. Shapiro and his family are moving to Georgia, where he is joining the practice of Advanced Urology of Georgia based in Atlanta.

Dr. Dobbs is doing a Robotic Urologic Surgery Fellowship at University of Pennsylvania Perelman School of Medicine for the next year.

We also bid a fond farewell to Andrology Fellow, Dr. Muhammad Asim Khan who completed the program. He is returning to Pakistan to join the faculty at Shifa International Hospital in Islamabad.

UI UROLOGY ANDROLOGY FELLOW

Andrology Fellow: Dr. Jose Miguel Flores Martinez

Dr. Flores has been an attending urologist at the University of Chile in Santiago, Chile but comes to UI Urology to acquire training in the most advanced technological andrology treatments and further his research. Dr. Flores completed residency training with the highest distinction at the University of Chile. He also completed a research fellowship at the University of Minnesota and was a medical director for Ferring Pharmaceuticals in Chile.

MEET OUR NEW RESIDENTS

Grace Chen, MD, is a graduate of Ohio State University College of Medicine. She graduated from University of Chicago in 2013 with a B.A. in Biology. While at OSUCOM, Grace worked on numerous research projects with Urology faculty. She is a freelance artist who created and illustrated a book of drawings on anatomy. Grace is also a passionate musician.

Graham Hale, MD, completed medical school at Sidney Kimmel Medical College at Thomas Jefferson University, where he was concurrently was in the inaugural class of the College within a College program. Graham graduated from Loyola University with a BA in Biology in 2014. He was awarded a full-time research fellow position at the NIH as part of the Medical Research Scholars Program in 2017-18. Graham has 20 peer reviewed publications and volunteered at the NCI Urologic on special oncology projects.
Screening:

Before conditions can be treated, they need to be diagnosed, of course. In the GU cancer area, particularly prostate cancer, the issue of screening has recently become somewhat controversial.

Twice in the past several years, panels that review PSA screening (the primary diagnostic for prostate cancer), specifically the U.S. Preventive Services Task Force, have altered their recommendations for PSA screening, Dr. Abern said.

First, in 2011, the group changed its screening guidelines for men 55-69 from “C” (when the patient consults with his physician whether to undergo periodic testing) to “D” (screening is not recommended).

The 2011 change was made, Dr. Abern said, because some cancers were “over-diagnosed” or did not threaten patients’ lives, so the treatment itself became a downside to screening for some patients. But in 2018 the group reversed its decision, returning its recommendation for men 55-69 to “C.”

“They’d already begun to see the repercussions from lack of screening,” Dr. Abern said. In addition, he noted, national screening guidelines for cancer simply have not addressed higher-risk patient groups — people of color, those of lower socioeconomic status or who have less access to health insurance, and those who may be affected by environmental factors.

“What all the task forces and committees that establish guidelines for screening and have changed their recommendations twice in the past decade have acknowledged is that we don’t have a lot of good information about how screening helps high-risk populations,” Dr. Abern said.

“We live in a high-risk community here in Chicago, so we’ve never believed there should be less screening; in fact, we think there should be more screening,” he said.

“We don’t know exactly why these disparities exist, but we believe the variables that contribute to the South and West Sides of the city, where prostate cancer mortality rates are three times the national average, may play a part. And there are not a lot of specific data on these groups and their risk factors, so we’re doing a lot of research in this area.”

In urban health settings like Chicago, he added, race and ethnicity, access to reliable transportation, and having public or no insurance versus private insurance can contribute to patients missing appointments or losing touch with the healthcare system, factors he and Dr. Moreira have documented in a paper published in the Journal of Community Health (https://www.ncbi.nlm.nih.gov/pubmed/28551861) and which the navigator program is designed to address.

Research and Clinical Trials:

The fourth most common cancer in men, and a condition that affects many women, bladder cancer and treatment for it have a unique history at UIC. Tice Bacillus Calmette-Guérin (BCG), the most common strain used for treatment, was invented at the UIC Institute for Tuberculosis research in 1950 (https://pharmacy.uic.edu/research/discoveries).

Getting appropriate access to BCG has become more challenging recently because the treatment drug faces global shortages at least through this year, Dr. Abern noted.

This shortage has made it extremely difficult for some physicians to treat their patients. But an ongoing UI clinical trial of BCG in high-grade invasive bladder cancer is providing resources other hospitals and physicians simply cannot, he said.

“Having this trial open ensures our patients get access to BCG in order to maximize the chances patients get to obtain treatment of bladder cancer, and reduce their risk of reoccurrence,” said Dr. Abern, the primary investigator of the trial at UIC.

“Our national clinical trial offers preferred access to that drug, which is the gold standard for care,” Dr. Abern added.

Other research efforts, Dr. Abern noted, are targeted toward improving early detection of prostate cancer with new imaging technologies. Dr. Abern was recently awarded a grant from the UI Cancer Center to develop a new MRI protocol for improving detection of prostate cancer.

This study will offer a novel MRI technique optimized for prostate cancer detection to men with elevated PSA and no prior biopsy. Then, these images can be combined with ultrasound to guide biopsies.

The study will also use artificial intelligence machine learning approaches to help determine how the cancer’s visual fingerprint can be found with the MRI protocol. The ultimate goal is to reserve invasive biopsy for those who really need them and improve the accuracy when they are needed,” he added. Even in cases that are far advanced, Dr. Abern noted, UI Urology’s approach can make a significant impact on the lives of patients.

“We’re offering treatment people cannot get elsewhere, including for patients in late-stage, even incurable phases of cancer. There’s still medical treatment available for maintaining quality of life, extending life in a meaningful way, and helping people reach life milestones: graduations, weddings, birthdays,” he added.

“The options we offer — no matter the stage of the condition — make a vital difference.”
UI UROLOGY’S MULTISPECIALTY TUMOR BOARD: A UNIQUE MODEL

At UI Health, cases of cancer — especially those requiring integration of medical and surgical expertise and treatment and/or multiple types of surgery — are best managed through a multidisciplinary team approach.

But managing these teams and the experts who comprise them, though a well-accepted model, can be difficult to implement, some studies have found. A unique form of collaboration, in addition to a diverse team of specialists, tends to produce the best results.

That’s why the multispecialty tumor board model UI Urology and UI Health employ for GU cancers is unique, said Michael Abern, M.D., assistant professor and director of urologic oncology. Dr. Abern started the tumor board in 2013 in order to bring together medical, surgical, and other experts on a weekly basis to manage the most complex cancer cases — including those involving collaboration with other surgeons, including transplant surgeons — the board develops “consensus recommendations” for each patient’s case, said Daniel Moreira, M.D., assistant professor of urology.

The board includes urologic cancer surgeons Dr. Moreira and Michael Abern, M.D., oncologists, radiation oncologists, pathologists, radiologists, clinical trials experts, researchers, nuclear medicine staff, patient navigators, social workers, and other professionals as needed (see accompanying photo). The goal, Dr. Moreira noted, is to “review all cases and make a plan, review diagnostics and treatment options, assess whether a clinical trial might be of benefit to a particular case, then develop the consensus plan for the case going forward.”

The tumor board’s track record recently was rewarded with full accreditation by the American College of Surgeon’s Commission on Cancer, reaffirming the board’s status as a top program.

A unique form of collaboration, in addition to a diverse team of specialists, tends to produce the best results.

“In some cases, we discuss how a patient’s case affects not only the individual but his or her familial risks, Dr. Moreira said. “Patients are referred to our UI Cancer Center genetic counselors to provide testing and screening recommendations for the patient’s family members. In addition, recently, the GU tumor board has welcomed our molecular pathology staff, who can make recommendations for genetic sequencing of individual tumors to guide precision medicine approaches,” he said. The tumor board model offers both patients and clinicians great benefits, Dr. Moreira added.

“We have the luxury of partnering multiple surgeons and physicians, when necessary, on the same case, which is typically quite difficult to coordinate. It produces results for patients and their families — regardless of the severity of the case.”
GENITOURINARY CLINICAL TRIALS

BLADDER

**BMS CA209901**  
A Phase 3, Open-label, Randomized Study of Nivolumab Combined with Ipilimumab, or with Standard of Care Chemotherapy, versus Standard of Care Chemotherapy in Participants with Previously Untreated Unresectable or Metastatic Urothelial Cancer

**A031501**  
Phase III Randomized Adjuvant Study of MK-3475 (Pembrolizumab) in Muscle Invasive and Lo-cally Advanced Urothelial Carcinoma (AMBASSADOR) Versus Observation

**S1602**  
A Phase III randomized Trial to Evaluate the Influence of BCG Strain Differences and T Cell Priming with Intradermal BCG Before Intravesical Therapy for BCG-Naïve High-Grade Non-Muscle Invasive Bladder Cancer.

RENSAL CELL CARCINOMA

**BTCRC-GU16-043**  
Single Arm Phase Ib/II Study of Durvalumab and Guadecitabine in Advanced Kidney Cancer: Big Ten Cancer Research Consortium

**HCRN-GU16-260**  
Phase II study of front line therapy with nivolumab and salvage nivolumab + ipilimumab in patients with advanced renal cell carcinoma

PROSTATE

**NRG GU006**  
A Phase II, Double-Blinded, Placebo-Controlled Randomized Trial of Salvage Radiotherapy with or without Enhanced Antiandrogen Therapy with Apalutamide in Recurrent Prostate Cancer

**ProSTAR**  
A Phase 1b/2 Study of CPI-1205, a Small Molecule Inhibitor of EZH2, Combined with Enzalutamide or Abiraterone/Prednisone in Patients with Metastatic Castration Resistant Prostate Cancer

GERM CELL TUMORS

**A031102**  
A Randomized Phase III Trial comparing conventional-dose chemotherapy using Paclitaxel, Ifosfamide, and Cisplatin (TIP) with High-Dose Chemotherapy using Mobilizing Paclitaxel plus Ifosfamide followed by High-Dose Carboplatin and Etoposide (TI-CE) as first salvage treatment in relapsed or refractory germ cell tumors

**AGCT1521**  
A Phase 3 Study of Active Surveillance for Low Risk and a Randomized Trial of Carboplatin vs. Cisplatin for Standard Risk Pediatrics and Adult patients with Germ Cell Tumors
The clinical navigator model is an increasingly popular and effective component of patient care. Navigators work with patients and families to help with many different needs associated with the health care system, and to improve compliance with following patients through diagnosis, treatment, and survivorship.

Typically, navigators are important, even primary points of contact with patients and their families to understand their care, prepare them for appointments, tests, and procedures, and thus contribute to quality of care and patient outcomes.

UI Urology’s navigator, America Carrillo, provides all these services, and more. A registered nurse and UIC doctoral student in nursing practice who is training to be a nurse practitioner, Carrillo joined the navigation team last August.

Consistent with her clinical experience and professional goals, she is putting in place a program based on research by UI Urology Drs. Michael Abern, Daniel Moreira, and others that found that a well-run navigation program has direct benefits in helping patients overcome barriers to cancer diagnosis and treatment (see related story), including helping to reduce cancer patient’s missed clinic appointments.

“Helping reduce patients’ stress and anxieties — talking them through the process around testing, biopsies, and other treatments — is so important,” Carrillo said. “Giving people information and personal contact is critical, because there are so many possible conditions and ways of treating them, and we want people to be as comfortable as possible in a stressful situation.”

One of Carrillo’s key initiatives was to develop a quality improvement project to improve instructions provided to patients who are preparing for prostate biopsy. Carrillo has developed a prep kit that includes pretest antibiotics and an enema, along with detailed instructions for the procedure, said Dr. Abern.
“Giving people information and personal contact is critical, because there are so many possible conditions and ways of treating them, and we want people to be as comfortable as possible in a stressful situation.”

“The goal is to increase patients’ health literacy around the process and as a result help them be calmer and more knowledgeable about their care,” Carrillo said. Reducing barriers to care or participation — even those as simple as not having to go to a pharmacy to get medications — can have significant impact, she said.

Her work is focused on patients in high-risk groups who comprise many of UI Urology’s patients and whose survival rates are much lower than the national average. These men — African-Americans, Latinos, men of color in general, smokers, and others — often need additional resources so they don’t miss appointments or get lost in the healthcare system. Language/cultural issues, the lack of strong partner/family support, and other factors can work against compliance, and, as a result, outcomes.

“A lot of what we do involves reassuring men — letting them know they’re not the only ones going through what they face, complementing the kind of support they get from their families, friends, and loved ones,” Dr. Abern said. “The men who do the best tend to have a spouse who’s helping them stay on track with their treatment, but a lot of men don’t have that.”

“The navigation program reduces the rate of men missing appointments by about 40 percent. America is part of a team that reassures patients and works in a specialized way with patients and their families to improve outcomes.”

In her role, Carrillo helps manage the prostate cancer “active surveillance” program — tracking and staying connected to men who are diagnosed early but who don’t require active treatment. Some of these men can get lost in the system and can suffer if their tumors change because they miss what Dr. Abern calls “the window of treatability.”

Part of tracking such patients, the program has found, involves language; many higher-risk patients are Spanish speakers, and in addition to her clinical and research skills, a vital component of Carrillo’s portfolio is her Spanish fluency. It’s a critical tool, part of her “personal stake in the Latino community,” Dr. Abern says.

Carrillo, like her clinical partners, often finds resistance or hesitancy from men. “They have excuses: ‘I have too much going on, I have work responsibilities,’ etc.,” she said. “But we tell them if they’re not taking care of this part of their health, the rest of their overall health will be affected. And if their health isn’t good, they might not be able to take care for their families.”

In the end, for Carrillo, it’s a very satisfying experience: “It’s so good to see patients not be so anxious and so open about their conditions,” she said. “The urologists have done a great job from the start making patients comfortable, and they’re going to have better outcomes as a result. And they do.”
AUA is the preeminent Urology conference each year, and it is always a treat when it is in Chicago. The department welcomed friends and colleagues from around the world and we loved seeing so many alumni at the reception.

The department was well represented with 12 presentations, and Dr. Crivellaro’s surgery was live-streamed at McCormick Place!
Dr. Mima discussing the impact of smoking on sexual function parameters.

If you are not already on our email list, please sign up on our website or email uroed@uic.edu. We want to stay in touch and hope to see you at the AUA2020 Reception in Washington D.C.!
PRESENTATIONS

DR. MICHAEL ABERN
• Chicago Urologic Society: Update on Bladder Cancer Biomarkers, Chicago, IL. Feb 2019
• UIC Innovation Center MEDI Conference, Innovations in Prostate Cancer Detection, Chicago, IL. Oct 2018

DR. ERVIN KOCJANCIC
• Meeting of the Functional Urology group- Grupo Urología Funcional (GUFU): Role of Urologist in gender affirming Surgery Cadiz, Spain. May 2018
• 12th Annual meeting of the Azeri Urology Society: Is there a Role of Minimally invasive technique in Male Urethral Stricture? Baku, Azerbajan. June 2018
• LII. International Annual Meeting of the Colombian Urology Society; International Neuro Urology Society (INUS) Lecture: 1. Reusable or Disposable catheters in management of Clean Intermittent catheterization. 2. What does a Urologist need to know in Gender Affirming Surgery? Cartagena, Colombia. Sep 2018
• 2nd Annual Live Surgery Training Course for Gender Affirmation Procedures WPATH: Metoidioplasty Panel on vaginoplasty surgery. New York City, USA. Feb 2019
• 13th Pan Arabic Continence Society (PACS) annual meeting: Failed Male Sling-What is next? Cairo, Egypt. Feb 2019

DR. SIMONE CRIVELLARO
• Italian Urologic Society, Live SP Surgery and Presentation. Rome, Italy Mar 2019
• AUA 2019, Live SP Surgery and Presentation. Chicago, IL, May 2019

CRAIG NIEDERBERGER, MD
• Zero Bar Innovation: What’s Up with Male Fertility? STARTART, Chicago, USA. Aug 2018
• Is There a Role for the Urologist in the Era of ART? Taste of Science Chicago, Apr 2018
• Northeastern Section American Urological Association, Chicago, USA. Oct 2018
• Congreso ANUER 2019: Algoritmo Práctico de Evaluación del Varón Infértil, Mexico City, Mexico. Jan 2019
• Congreso ANUER 2019: Biopsias Testiculares Quien, Cuando y Tips Prácticos, Mexico City, Mexico. Jan 2019
• XIII International Congress on Reproductive Medicine: Male Fertility: The Missing Half. Moscow, Russia, Jan 2019
• 8th International IVIRMA Congress: Association of male factor infertility with somatic health. Mallorca, Spain. Apr 2019
• 8th International IVIRMA Congress: Pre-TESE: natural or stimulated spermatogenesis? Mallorca, Spain. Apr 2019
• 8th International IVIRMA Congress: Extraction of sperm: what is the best way? Mallorca, Spain. Apr 2019

GAIL PRINS, PHD
• 12th Annual National Symposium on Prostate Cancer: Stem cell lineage hierarchy by keratin profiling in normal human prostate epithelial cells and prostate cancer. Atlanta, GA. Sep 2018
• Great Lakes Center for Children’s Environmental Health: Chemicals, Pollution and Pregnancy: Perinatal Exposure to BPA Effects Prostate Health in Male Offspring, Chicago, IL. Oct 2018
• Society for Basic Urologic Research Annual Meeting: Estrogenic Signaling as Key Regulators of Prostate Stem-Progenitor Cell Homeostasis, Nov 2018, Palm Springs CA
• University of Chicago, Department of Medicine, Division of Endocrinology: Estrogenic Signaling as Key Regulators of Prostate Stem-Progenitor Cell Homeostasis, Feb 2019.
• American Association for Cancer Research Conference on Environmental Carcinogenesis: EDCs Increase Prostate Cancer Susceptibility by Targeting Stem Cells and Reprogramming the Epigenome. Charlotte, NC. June 2019

EMILIE JOHNSON, MD
• Pediatric Urology Fall Congress, Invited Panel Presentation: They Say Most Clinical Research is Wrong - Is It Still Worth Doing? Atlanta, GA, Sep 2018.
• Oncofertility Consortium Meeting, Invited Panel Presentation: Fertility Preservation and Potential for Children with Differences (Disorders) of Sex Development. Chicago, IL. Nov 2018
• Society for Pediatric Urology Annual Meeting: Faces of Pediatric Urology. Chicago, IL. May 2019
IT IS WITH GREAT SADNESS THAT WE SAID FAREWELL TO TWO MEMBERS OF OUR UROLOGY FAMILY.

**Dr. Ashay Kparker**, who died last summer, was a 2009 graduate of the residency program. He was a graduate of Duke University in Durham, N.C., where he received a dual undergraduate degree in engineering and biomedical engineering and chemistry. He went on to complete his medical degree and urology residency at UIC. Dr. Kparker joined the department as an assistant professor and worked with UI Urology until he left in 2015 to join his father in private practice in Indiana. He also practiced at Porter (IN) Health Care System.

**Dr. Mark Lindgren**, class of 2015, passed away in early May. Dr. Lindgren was an assistant professor at the University of Oklahoma. He realized his calling as a doctor after working as an engineer and went to medical school at Mount Sinai School of Medicine in New York. He completed his urology residency at UIC. After his training, Dr. Lindgren pursued a fellowship in men’s health with Dr. Larry Lipshultz at Baylor University. Dr. Lindgren and his wife returned to Oklahoma where he took a position with the University of Oklahoma Health Sciences Center as an attending physician and associate professor.

“Dr. Kparker and Dr. Lindgren were bright shining lights in our urology program from the moment they started their programs and graced us with their presence, brilliant minds and caring souls,” said Craig Niederberger, M.D., UI Urology head and Clarence C. Saelhof Professor of Urology.