We are pleased to bring you the 3rd edition of Urology in Practice. Highlighted herein are some of the new faculty achievements, ongoing clinical trials and events hosted by the Institute. Also, we inform regarding our upcoming conferences and events.

The USC Institute of Urology is a community of excellence that is rapidly growing in size, reach and sophistication. Over the past five years, the number of our full-time faculty has increased from 17 to 34. In 2015, four new faculty joined us: Andre Berger, MD (robotics), Virinder Bhardwaj, MD (outreach urology), Harriet Chang, PhD (neurourology research) and Rene Sotelo, MD (robotics).

A major highlight, both for the department and personally, was hosting the 92nd meeting of the Clinical Society of Genito-urinary Surgeons (CSGUS), the most prestigious urologic society. Additionally, we hosted many other events, including our 2nd annual Gala “Changing Lives, Creating Cures”, the AUA Small Renal Mass 360°, the 7th International Focal Therapy Summit, as well as hosting a urology delegation from China.

There is excitement in the air, and dynamic progress on the ground! As these pages reflect, much is in the works at USC!

Inderbir S. Gill, MD
Professor & Chairman,
Catherine & Joseph Aresty Department of Urology
Executive Director, USC Institute of Urology
Associate Dean, Clinical Innovation
Keck School of Medicine of USC

In This Issue:

Page 2 Currently Active Research Trials
Page 4 New Recruits
Page 6 Year In Review
Page 8 Upcoming Conferences

Editor’s Corner

This edition pertains to a summary of trials (either clinical or basic science/translational) running primarily through USC Institute of Urology. Additionally the issue includes stories on pediatrics, medical oncology and radiation oncology in which we also actively participate. We also present a snapshot of the “year passed” and “year to come” conferences, meetings and events that USC Urology has hosted or will soon host. We’ll get back to our interesting CME case discussion in the next edition.

Hooman Djaladat, MD, MS
Associate Professor of Urology
Catherine and Joseph Aresty Department of Urology
Keck School of Medicine of USC
Editor, Urology in Practice
A Phase III Surgical Trial to Evaluate the Benefit of a Standard Versus an Extended Lymphadenectomy Performed at Time of Radical Cystectomy for Muscle Invasive Urothelial Cancer (SWOG 1011)

This study compares disease-free survival in patients with muscle invasive urothelial carcinoma of the bladder treated with radical cystectomy and extended pelvic lymph node dissection compared to radical cystectomy and standard pelvic lymphadenectomy.

Phase II Trial of Retroperitoneal Lymph Node Dissection as First-Line Treatment for Testicular Seminoma With Isolated Retroperitoneal Disease (>2cm)

The standard treatment for stage IIA seminoma is radiation, although literature lacks data on applicability of surgical intervention at this stage which is a proven treatment modality in non-seminomatous patients at similar stage. RPLND as an option is tested in this trial.

Principal Investigator: David Ginsberg, MD

Implantable Systems Performance Registry (ISPREG)

This prospective data registry will evaluate the long-term reliability and performance of Medtronic Neuromodulation stimulation devices in patients with urge incontinence, urgency-frequency and retention.

Mid-Urethral Autologous Fascial Sling Outcome in Patients With Previously Failed Mid-Urethral Mesh Sling

This study evaluates the clinical and quality of life outcomes of patients treated with autologous fascial slings after mesh problems.

Principal Investigator: Matthew Dunn, MD

A Study to Evaluate the Technique, Success and Complications of Upper Tract Access in Ureteroscopy and Percutaneous Renal Surgery

Therapies for nephrolithiasis of the upper urinary tract include ureteroscopy (URS) and percutaneous nephrolithotomy (PCNL). This study seeks to evaluate our ability to gain access to the upper collecting system and describe our maneuvers to bypass these occasional difficulties.

Post FDA-Approval Clinical Evaluation of BackStop™ in Patients Undergoing Ureteroscopic Lithotripsy: A Prospective, Randomized Clinical Trial

This post-approval clinical study is to evaluate BackStop, a polymer-based device intended to be used during ureteroscopic lithotripsy to prevent retrograde stone migration under actual conditions of use.

Principal Investigator: Gerhard Coetzee, PhD

Prostate Cancer Risk Enhancers

The major goals of this project are to understand the functions of prostate cancer risk enhancers and their target genes.

Principal Investigator: Chih-Lin Hsieh

Prevention of Parastomal Hernia Following Radical Cystectomy and ileal conduit Using Biological Mesh: Randomized Clinical Trial

Although most parastomal hernias are managed conservatively, it has been shown that approximately less than a third eventually require surgical intervention secondary to obstruction, pain, bleeding, poorly fitting pouching systems, or leakage. Therefore, a preventive approach using prophylactic mesh replacement seems to be a logical option in this setting to be tested.

Principal Investigator: Hooman Djiladat, MD, MS

Determining the Mechanistic and Therapeutic Roles of microRNAs in Bladder Cancer

The goals of this project are to identify specific miRNAs for diagnostic and prognostic purposes in bladder cancer patients, reactivate silenced tumor suppressor miRNAs by epigenetic treatment; and characterize the role of miRNAs during tumorigenesis and re-express multiple tumor suppressor miRNAs in bladder cell lines.

Principal Investigator: Gangning Liang, MD, PhD

The major goal of this study is to carry out combined linkage analyses from the purpose of identifying prostate cancer susceptibility genes.

Principal Investigator: Chih-Lin Hsieh

Identification of a Sensitive and Specific Panel of DNA Methylated Markers to Improve Renal Needle Biopsy Accuracy

The goal of this project is to identify DNA methylation markers that can improve the diagnostic value of needle biopsies.

Principal Investigator: Gangning Liang, MD, PhD

De Novo DNA Methylation in Bladder Cancer

The goals of this project are to determine how DNA methylation patterns evolve during bladder carcinogenesis and to detect bladder cancer recurrence.

Principal Investigator: Gangning Liang, MD, PhD

Mechanisms of De Novo Methylation in Cancer

The goals of this project are to study mechanisms of de novo methylation in culture systems and to probe the potential roles of chromatin structure in defining DNA methylation patterns.

Principal Investigator: Gangning Liang, MD, PhD
Rene Sotelo, MD, is one of the most expert and experienced laparoscopic/robotic surgeons internationally. Hailing from Latin America, he is a pioneer in robotic surgery for complex urinary fistulae in females and males, benign prostate enlargement and inguinal lymph node dissection for cancer. He has helped to develop the novel concept of single-port “belly-button” and natural orifice surgery. Professor Sotelo’s experience with advanced robotic and laparoscopic surgery exceeds 2,300 personal cases, making him among the most experienced in the world.

Dr. Sotelo was previously professor and chairman in the Department of Urology for Robotic and Minimally Invasive Surgery in Caracas, Venezuela. In addition, he has published more than 60 peer reviewed scientific papers and 28 chapters in a major urology books.

Dr. Berger returns to USC after spending a year as assistant professor of urology at the University of Miami, Miller School of Medicine. Dr. Berger completed fellowships at Keck Medical Center of USC and the Cleveland Clinic. He served his residencies in both urology and general surgery at the Hospital de Clínicas de Porto Alegre in Brazil. He attended medical school at Brazil’s Universidade Federal do Rio Grande do Sul. Dr. Berger has published more than 100 peer reviewed scientific papers and is a reviewer to multiple urology journals.

Dr. Bhardwaj comes to the USC Institute of Urology from Henry Ford Health System in Detroit, MI, where he was chairman of the Department of Urology at Metro Medical Group. He practices at Sierra View Medical Center in Porterville, CA, providing urological care to Central California residents. In addition to general urology services, Dr. Bhardwaj specializes in providing treatment for fecal incontinence and neuromodulation for refractory/overactive bladders. He served his residencies in urology at Wayne State University Hospital in Detroit, MI, and St. Joseph Mercy Hospital in Ann Arbor, MI. He attended medical school at India’s Dayanand Medical College and Hospital. Dr. Bhardwaj is board-certified and is a member of the American Urology Association. He is currently serving as president-elect for the Tulare County Medical Society.

Dr. Chang came to the USC Institute of Urology from the University of California, Irvine, where she served as an assistant researcher in the Department of Anesthesiology and Perioperative Care. While at UCI, she worked to investigate the possible pharmacological treatments and mechanisms in a model of visceral pain induced by cystitis. She also studied the reflex pathways of external urethral sphincter on detrusor-sphincter dyssynergia after spinal cord injury by using spinal cord stimulation.

Dr. Chang received her doctorate in biomedical engineering from National Cheng Kung University in Taiwan. She completed a pre-doctoral fellowship in pharmacology at the University of Pittsburgh School of Medicine, followed by post-doctoral work in neurology at the University of California, Los Angeles. She recently received an RO 1 grant from NIH to pursue research in neurogenic bladder.
USC Institute of Urology: Year in Review

Exciting events have taken place over the past fiscal year at USC Institute of Urology. Below is a snapshot of the four scientific meetings we have hosted. Each allowed us to share our expertise with colleagues to advance the field of urology.

AUA SMALL RENAL MASS SYMPOSIUM:
International leaders in urology gathered at USC for the American Urological Association (AUA) Consensus Conference on the Small Renal Mass on Oct. 23, 2014. Thought leaders presented a 360° view of the latest contemporary issues pertaining to small renal masses (SRM), including pathology, epidemiology, practice patterns, needle biopsy, active surveillance, and surgical techniques/outcomes of partial nephrectomy (robotic, laparoscopic and open) and thermal ablation (cryotherapy, RFA and HIFU).

On the first day, a consensus conference on the SRM featured in-depth presentations by more than 30 key opinion leaders covering the current state of knowledge about SRM, which was streamed live via the internet. Days 2 and 3 featured renal mass hands-on labs hosted simultaneously by two institutions. In Los Angeles, the program at the Keck School of Medicine of USC was led by Monish Aron, MD, and Mihir Desai, MD. In Detroit, the program at Henry Ford Hospital was led by Craig Rogers, MD.

CSGUS MEETING:
USC welcomed the 92nd meeting of the Clinical Society of Genito-Urinary Surgeons (CSGUS) at the USC Health Sciences Campus on Nov. 20-22, 2014. CSGUS is one of the most prestigious societies in the field of urology, whose members include some of the top academic urologists in the United States. The annual meeting began at the USC Institute of Urology’s annual gala, continued with a full day of intensive lectures and discussion on all aspects of urological surgery and concluded with a literary discussion featuring Siddhartha Mukherjee, author of “The Emperor of All Maladies: A Biography of Cancer,” which won the 2011 Pulitzer Prize.

CHINESE DELEGATION, LIVE SURGERIES:
On May 11, 2015 around 45 urologists visiting from China gathered in the Aresty Auditorium at the Health Sciences Campus at USC to view live surgeries performed by USC Institute of Urology faculty. The following surgical procedures were covered at this conference: fascial sling placement, robotic radical cystectomy and urinary diversion, robotic partial nephrectomy and percutaneous nephrolithotomy. Led by Dr. Hui Wen Xie, the Chinese urologists were able to observe first-hand the minimally invasive and innovative techniques practiced at USC. There was fruitful discussion during the cases led by moderators and, overall, this was regarded as a strong educational and scientific collaborative program.

“CHANGING LIVES AND CREATING CURES” GALA EVENT:
More than 500 philanthropists, entertainment industry executives, medical professionals, celebrities, media and other VIPs from Los Angeles and around the country attended the gala on Nov. 20, 2014, which helped raise $2.3 million for advancing innovative treatments, research efforts and world-class programs of urology care at the Institute of Urology at USC. The gala also showcased comedian Jay Leno, singer-songwriter Sheryl Crow and actor Joe Piscopo as emcees. A highlight was the presentation of the inaugural Louis Zamperini Courage Award to Derrick Hall, president and CEO of the Arizona Diamondbacks major league baseball franchise. Hall is a prostate cancer survivor who has made a significant contribution to promote awareness and encourage men above 40 to do a PSA test and prostate cancer screening. He is a tireless advocate of cancer-fighting charities, including his recently formed Derrick Hall Pro-State Foundation, created to support patients and families battling prostate cancer.
USC Institute of Urology Upcoming Conferences

1st Annual Practical Urology
This is a comprehensive urologic conference covering various topics of kidney, bladder and prostate cancer, testis and penile cancer, female urology, male reconstructive and ED, prostatic hyperplasia, urolithiasis, infertility and even reimbursements.
**Date & Location:** February 4-6, 2016;
Aresty Auditorium, USC Health Science Campus

Radical Cystectomy Course
This course will provide comprehensive nuts and bolts technical review with live demonstrations and video presentations for robotic and open bladder cancer surgeries.
**Date & Location:** March 4-5, 2016;
Aresty Auditorium, USC Health Science Campus

Pre-AUA International Robotic & Open Live Surgery Symposium: “LA Live”
This pre-AUA conference will cover various topics in urology using open and robotic surgical methods. With a large international guest faculty presence, there will be panel discussion and live surgery transmissions available to the attendees.
**Date & Location:** May 4-5, 2016;
Aresty Auditorium, USC Health Science Campus

Robotic Japanese Partial Nephrectomy Course
This post-AUA course will present various robotic partial nephrectomies to primarily Japanese surgeons with invitation open to all.
**Date & Location:** May 11-12, 2016;
Aresty Auditorium, USC Health Science Campus

Complications in Robotic and Laparoscopic Surgery
This course will discuss specific laparoscopic and robotic surgery cases and corresponding complications.
**Date & Location:** September 16-17, 2016; TBD

Resident’s Preceptorship in MIS
This conference will cover the progress and future of robotic and laparoscopic surgery through live surgeries and case presentations. Limited to national and international urology residents.
**Date & Location:** October 28-29, 2016;
Aresty Auditorium, USC Health Science Campus

For more information on the USC Institute of Urology or our upcoming events, please contact Regina Rezex at rezex@med.usc.edu.