UC Irvine Department of Urology
Clinical, Volunteer and Staff Faculty

Jaime Landman, MD
Professor and Chair
Department of Urology

Dr. Landman has extensive clinical expertise in laparoscopic renal and prostate surgery and endoscopic management of urinary tract pathology. He has pioneered technology and techniques for minimally invasive management of renal malignancies and has developed novel techniques that are used globally for laparoscopic partial nephrectomy. He completed his fellowship training in minimally invasive urologic surgery at Washington University, St. Louis, Mo. For appointments and referrals, please call: 714.456.7005

Gamal Ghoniem, MD
Vice Chair and Professor of Clinical Urology
Chief, Urology Service at the VA Long Beach Healthcare System

Dr. Ghoniem specializes in pelvic reconstruction surgery and voiding dysfunction. He did his postgraduate fellowship training in urology and female urology at Brown University, Providence, R.I. For appointments and referrals, please call: 714.456.7005

Thomas E. Ahlering, MD
Vice Chair and Professor of Urology

Dr. Ahlering is well known for laparoscopic radical prostatectomy using the da Vinci Robotic Surgical System®. He specializes in treatments for cancer of the prostate, bladder, kidney and testis. He did his postgraduate fellowship training in urologic oncology at University of Southern California, Los Angeles. For appointments and referrals, please call: 714.456.6068 9 a.m. - 3:45 p.m.

Elspeth M. McDougall, MD
Professor of Urology
Associate Dean of Simulation and Continuing Medical Education
Director, UC Irvine Surgical Education Center
Chair, AUA Office of Education

Dr. McDougall specializes in minimally invasive surgery for the treatment of kidney stones and strictures of the ureter. She did her postgraduate fellowship training in endourology and extracorporeal shock wave lithotripsy at Washington University Medical School, Barnes Hospital, St. Louis, Mo. For appointments and referrals, please call: 714.456.7005

Atreya Dash, MD
Assistant Professor of Clinical Urology

Dr. Dash completed a fellowship in urologic oncology at Memorial Sloan-Kettering Cancer Center in New York. He has experience in all areas of urologic oncology, including the advanced surgical treatment of prostate, renal, testis and bladder cancers. His patient treatment modalities include robot-assisted and laparoscopic surgical technologies to improve the care and recovery of patients with urologic cancers. For appointments and referrals, please call: 714.456.7005

Tony E. Khoury, MD
Professor of Urology
Walter R. Schmid Chair in Pediatric Urology and Chief, Pediatric Urology

Dr. Khoury is world renowned for his expertise in the medical and surgical management of complex pediatric urology anomalies. His services include reconstructive surgery for incontinence, genital anomalies, renal transplantation and oncology. He did his postgraduate fellowship training in pediatric urology at the Hospital for Sick Children in Toronto, Ontario, Canada. For appointments and referrals, please call: CHOC Children's Urology Center: 714.512.3919 For academic issues: 714.512.3914

Leland Ronningen, MD
Clinical Professor

Dr. Ronningen provides urologic care at the VA Long Beach Healthcare System’s Spinal Cord Injury/Disability Center. He also has an interest in benign diseases of the prostate. He received his urology training at Letterman Army Medical Center, Presidio of San Francisco, and the Portsmouth Naval Hospital in Portsmouth, Va. For appointments and referrals, please call: 714.456.7005

Bernard Turbow, MD
Clinical Professor of Urology

Dr. Turbow specializes in general urology and supervises residents in training and medical students in the Center for Urological Care. For appointments and referrals, please call: 714.456.7005

Gordon A. McLorie, MD
Professor of Urology

Dr. McLorie specializes in pediatric reconstructive surgery, hypospadias repair, bladder extrophy, incontinence surgery, pediatric urological oncology and renal transplantation. He completed an oncology fellowship at University of California, Los Angeles and also a fellowship in pediatric urology at Harvard Medical School, Boston. For appointments and referrals, please call: 714.512.3919

Aaron Spitz, MD
Assistant Clinical Professor Male Reproductive Medicine and Surgery

Dr. Spitz has expertise in the treatment of male infertility and sexual dysfunction. He did his fellowship training at Baylor College of Medicine, Houston, Tex. For appointments and referrals, please call: 714.456.7005

Elspeth M. McDougall, MD
Professor of Urology
Associate Dean of Simulation and Continuing Medical Education
Director, UC Irvine Surgical Education Center
Chair, AUA Office of Education

Dr. Spitz has expertise in the treatment of male infertility and sexual dysfunction. He did his fellowship training at Baylor College of Medicine, Houston, Tex. For appointments and referrals, please call: 714.456.7005

Joel Gelman, MD
Associate Clinical Professor Volunteer Clinical Faculty

Dr. Gelman has expertise in the treatment of urethral stricture disease, Peyronie's disease, erectile dysfunction, hypospadias and other disorders of the urethra and male external genitalia. He did his postgraduate fellowship training in adult and pediatric GU reconstruction at Eastern Virginia Medical Center, Norfolk, Va. For appointments and referrals, please call: 714.456.2951

Irene M. McAleer, MD
Associate Clinical Professor

Dr. McAleer is fellowship trained and board certified in pediatric urology. She specializes in antenatal genitourinary conditions, medical and surgical management and diagnosis of vesicoureteral reflux, hypospadias and intersex reconstruction as well as in endoscopic treatment of pediatric stone disease. For appointments and referrals, please call: 714.512.3919

University of California, Irvine
Department of Urology
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Orange, CA 92868
www.urology.uci.edu
A message from the chair

It has been a challenging yet rewarding first 20 months as chair of the Department of Urology at UC Irvine. Our dedicated urology team, numbering 80 members, continues to advance initiatives and cultivate programs under the School of Medicine's tripartite mission: Discover. Teach. Heal.

We would like to extend congratulations to Dr. Elspeth McDougall for being awarded the Endourological Society 2012 Ralph Clayman “Mentor” Award for pioneering work in urologic laparoscopy, simulation training and education in minimally invasive urology, presented at the World Congress of Endourology in Istanbul, Turkey.

Also, congratulations to Dr. Thomas Ahlering, Dr. Ralph Clayman, Dr. Atreya Dash, Dr. Joel Gelman, Dr. Gamal Ghoniem, Dr. Tony Khoury and Dr. Elspeth McDougall for being recognized by U.S. News & World Report Top Doctors in collaboration with Castle Connolly Medical Ltd., an honor based on a peer nomination process.

We are pleased to announce that Dr. Will Sohn, Department of Urology clinical instructor, has been awarded a CaPSURE™ fellowship this year for research in prostate cancer. The UC Irvine mentors will be Dr. Sheldon Greenfield, Department of Medicine, and Dr. Atreya Dash, Department of Urology, and the national program mentor will be Dr. David Penson at Vanderbilt University. Department of Urology. CaPSURE is the Cancer of the Prostate Strategic Urologic Research Endeavor, which is managed by University of California, San Francisco, Department of Urology.

We welcome Dr. Debra Morrison, UC Irvine Director of Pre-op Anesthesia, to our faculty. She is optimizing clinical work and has been instrumental in coordinating research efforts and educational programs, including ultrasound biopsy in the urology patient care center. In addition, we are elated with the opportunity to advance outpatient diagnosis with a noninvasive modality -- a novel ultrasound probe -- facilitating ultrasound-guided biopsies for early treatment of renal masses and to assist PCNL procedures without ionizing radiation (no fluoroscopy).

We are also delighted to be offering at the beautiful Pelican Hill Resort, Newport Coast, Calif., a free tuition mini-fellowship, “Comprehensive Minimally Invasive Surgical Renal Tumor Management.” This mini-fellowship course is for postgraduate urologic surgeons who are interested in introducing into their practice or academic department cutting-edge technology for renal tumor management (page 13).

The recent Urology Health Program is a new initiative to educate, heighten awareness and motivate department members who would like to make positive changes in their lifestyle. This program includes weekly health tips, a log for tracking water intake, nutrition lectures and a weekly yoga class.

The newly formed Urology Interest Group for UC Irvine medical students, years 1-3, was created for those who are interested in learning more about urology. Their first meeting was a potluck dinner, Aug. 24, 2012, at the home of Dr. Elspeth McDougall, focusing on women in surgical subspecialties. Three local female urologists and one urology resident shared their insights and unique perspectives with the 21 medical students in attendance.

Our department faculty and staff continue to advance urologic medical and surgical care, through research and scientific innovations for our community locally and worldwide. We wish you and your family good health.

Jaime Landman, MD
Professor of Urology and Radiology
Chairman, Department of Urology
University of California, Irvine
The Dean’s Corner

UC Irvine Health is my home, and I share it with some of the most gifted and inspiring faculty members in the world. There are two aspects to UC Irvine Health: our academic campus in Irvine and our medical center in Orange, which together support our faculty members' collective passion for advancing medicine, teaching students and improving lives through clinical excellence. These actions define our tripartite mission: Discover. Teach. Heal. They also contribute to our success as one of the nation's top research universities and one of America's Best Hospitals, as reported by U.S. News & World Report for the 12th consecutive year.

In particular, I am proud to introduce this newsletter to you because it highlights the services, achievements and aspirations of our Department of Urology. As a urologist and former chair of the department, I have an abiding desire to see that UC Irvine remains a world leader in urologic treatment and research. I also believe, in academia, one of our goals must be to continuously collaborate and share knowledge with you, our colleagues.

The success of the Department of Urology at UC Irvine is due to a multidisciplinary team of dedicated individuals. To this end, I was delighted to recruit Dr. Jaime Landman to become the chair of urology in January 2011. His vision and capacity as a researcher, teacher and clinician perfectly fit our tripartite mission while maintaining the focus of the department as a world leader in minimally invasive surgery in all of its forms: laparoscopic, needle ablative, robotic, ureteroscopic and percutaneous. The members of the Department of Urology, as you will soon learn, are all fellowship-trained experts in their area of interest be it robotic oncological surgery, endourology, pediatric surgery, urethral reconstruction or female/pelvic urology.

At every turn in the road, the Department of Urology, as with all faculty at UC Irvine, seeks to be an ally and resource for you as you build your practice or continue to advance your studies. The goal of the School of Medicine is to spark innovation, provide educational opportunities and improve communication in a manner that enriches the practice of medicine/surgery, in urology and in all of our other clinical disciplines in the community, across the nation and around the world.

Ralph V. Clayman, MD
Dean, UC Irvine School of Medicine
Professor of Urology

Dr. Ralph Clayman working with an endoscope
The concept of hypothermic robot-assisted radical prostatectomy (RARP) is exactly like icing a sprained ankle. Localized hypothermia prepares the urinary sphincter that controls continence, by cooling the tissue to approximately 50 degrees F. In essence, cooling lowers the metabolism of the muscle and surrounding tissue during RARP in order to prevent injury from inflammation. After patients are anesthetized, a balloon is placed in the rectum cooling the relevant structures prior to beginning the surgery. The balloon is removed shortly after surgery. In clinical trials of more than 500 patients, incontinence has been reduced 70%.


One in six American men will be diagnosed with prostate cancer within their lifetime. Approximately 27,000 men die annually from prostate cancer, making it the second most fatal cancer in men. Advances in the early detection and treatment of this disease are believed to have sharply increased the survival rates. Ten-year disease-specific survival rates in patients who had a robotic prostatectomy are greater than 90%. When removal of the prostate is warranted, several important factors regarding the procedure are commonly taken into consideration by both patients and physicians:

- prostate cancer surgery
- safety of robotic prostatectomy
- urinary control or continence
- erectile function after robotic prostatectomy
- robotic prostatectomy and pain/blood loss
- return to work/activities after robotic prostatectomy

With such important issues at stake, it is important for patients to receive the very best treatment possible. The Department of Urology at UC Irvine Medical Center was one of the first institutions to offer robotic prostatectomy using the da Vinci Robotic Slave Interface. This innovative technology, listed as number one in Forbes Magazine’s "Five Robots That Will Change Your Life," provides unprecedented 3-D vision and precise robotic instrument manipulation and control.

Minimally invasive surgical removal of the prostate for cancer

Intuitive Surgical's da Vinci Surgical System combines superior 3D high definition vision with patented EndoWrist® Instruments allowing for enhanced dexterity, precision and control.
Dr. Thomas Ahlering is co-chair of the newly formed UC Irvine Prostate Cancer Disease Oriented Team (PC-DOT). The multidisciplinary consortium is composed of UC Irvine investigators from the disciplines of radiology, pathology, molecular biology/biochemistry, epidemiology and biostatistics, urology and electrical engineering/computer science. The PC-DOT will carry out clinical and translational research under the auspices of the Chao Family Comprehensive Cancer Center, a National Cancer Institute-designated comprehensive cancer center, having these programmatic components that are highly relevant to prostate carcinogenesis.

1. Prostate Cancer Prevention
2. Prostate Cancer Screening & Diagnostics (early disease)
3. Prostate Cancer Therapeutics

These programs are being investigated and offer an opportunity for close collaborative interaction among the participants. The precision of robotic technology is ideal for delicate and complex urologic surgeries. Dr. Ahlering is internationally recognized for refining techniques that reduce side effects after prostate surgery, enhancing cancer control and providing for quicker patient recovery.

Surgery-safe clamp, sparing the potency nerves of the neurovascular bundle, eliminating the use of electrocautery.

Single-knot anastomosis utilizing a single ‘running’ stitch to reattach the urethra to the bladder, greatly simplifying a taxing laparoscopic technique.

Endorectal cooling balloon with recirculating cold water, utilized during RALP.

Dr. Ahlering has the second largest series of publications relating to robotic prostatectomy in the literature and has written more than 50 scientific publications and book chapters, specifically on robotic prostatectomy, of which seven papers bring forth new advancements in techniques. He is a reviewer for the journals Urology, Journal of Endourology, and the Journal of Urology, and associate editor of Journal of Robotic Surgery. He is a member of several of the societies of the American Urological Association and served as its Western Section president from 2007-2008.

UC Irvine Chao Family Comprehensive Cancer Center top investigator award

These annual awards by the Chao Family Comprehensive Cancer Center are provided in recognition of investigators who accrue the greatest number of patients to clinical trials.

Congratulations to Dr. Thomas Ahlering for being awarded first place in three categories.

❖ Therapeutic
❖ Supportive Care
❖ Screening
The American Urological Association Board of Directors approved the BLUS Curriculum Validation Study at its October 2011 meeting. This curriculum consists of the online Basic BLUS Handbook and a corresponding multiple-choice questions examination, along with four laparoscopic urologic surgery skills tasks that include clip applying of a pulsatile arterial model, developed by Dr. Robert Sweet and his research team at the University of Minnesota. Dr. Elspeth McDougall serves as the P.I. and director of the AUA BLUS study.

The BLUS study will utilize the Simulab EDGE device (Electronic Data Generation for Evaluation) for validating the four skills tasks. The EDGE device includes unique features such as a pelvic box format providing for automatic economy of motion measurement of the surgeon's skill performance, which also measures the force the surgeon uses on the laparoscopic instruments. Other surgical education researchers have demonstrated that both economy of motion and instrument force are directly correlated to the experience of the surgeon. The BLUS study will further delineate this observation in urologic laparoscopic skills training.

The collaborative BLUS project group of ten national centers implemented the testing in March 2012.

The initial BLUS validation study will finalize construct validity and establish a ‘passing score’ utilizing the EDGE device. The second part of the study will be a longitudinal study of the trainees at each BLUS study center, with testing on the BLUS skills tasks every three months, then correlating this with their laparoscopic clinical experience. The timeline for the completion of the construct validity testing and the longitudinal BLUS skills testing will be two years.
Can preoperative warm-up (POW) improve surgeon performance in the operating room?

Seven surgeons performed four laparoscopic renal surgeries each after randomization to ‘with’ or ‘without’ 20 minutes of practice before the procedure. Cognitive and psychomotor performance was assessed by using a seven-lead EEG instrument and eye tracking monitoring, along with expert surgeon assessment of video recordings of two key steps of the surgery.

Attention, distraction, workload, spatial reasoning, movement smoothness, posture stability and technical performance were all better in the +POW group (p<0.05). Technical performance improvement was noted only in the initial step of the procedure.

Even for experienced surgeons, practice does improve performance.


Impact of preoperative warm-up exercises on surgeon performance during laparoscopic surgery

Dr. McDougall joined the UC Irvine Department of Urology faculty in 2002 to continue her clinical and research work in minimally invasive urologic surgery and assist in the development of a minimally invasive surgery education center. She is internationally recognized for her laboratory and clinical research in urologic laparoscopic surgery and for teaching courses on fundamental and advanced endourological and laparoscopic techniques.

Dr. McDougall completed her medical and residency training at the University of Calgary and the University of Ottawa in Canada, and then undertook a fellowship in endourology and extracorporeal shock wave lithotripsy (ESWL) with Dr. Clayman at Washington University School of Medicine. She joined the faculty at Washington University Medical School in 1991, where she spent nine years in academic urology. Subsequently, she developed the Endourology/Laparoscopic Urology Program at Vanderbilt University in Nashville, Tenn., during her tenure there as professor of urologic surgery. She is a fellow of the Royal College of Surgeons of Canada (urology) and certified with the American Board of Urology. Dr. McDougall has published more than 230 peer-reviewed journal articles and numerous book chapters. She is the co-editor of two textbooks on laparoscopic surgery. In 2008, Dr. McDougall successfully completed a Master in Health Profession Education from the University of Illinois at Chicago.

Dr. McDougall has been chairperson of the AUA Laparoscopy Committee and coordinated the AUA Ad Hoc Surgical Simulation Group. She has now assumed the position as chair of the American Urological Association Office of Education. She is on the editorial boards of the Journal of Endourology and the Journal of the Society of Laparoendoscopic Surgeons. She is past president of the Society of Laparoendoscopic Surgeons and was awarded the Excel Award by this multidisciplinary surgical society in 2007. She is a member of the World Congress of Endourology’s Scientific Meeting Advisory Committee. She is an elected member to the prestigious American Association of Genitourinary Surgeons and was a junior council member for that organization from 2007 - 2009.

Dr. McDougall is director of the UC Irvine Surgical Education Center and has developed the ongoing, five-day mini-fellowship training program in minimally invasive urologic surgery for postgraduate urologists. She is also program director for the Urology Residency Training Program and associate dean of Simulation and Continuing Medical Education.
Research

Xiaolin Zi, PhD, Associate Professor
Director of Urologic Research

Graduate
McGill University, Montreal, Canada

Doctorate
Shanghai Medical University, P.R. China

Postdoctoral Training
Case Western Reserve University, Cleveland, and McGill University, Montreal, Canada

Dr. Xiaolin Zi combines knowledge in population science with laboratory skills in basic science to develop less or non-toxic bioactive agents from edible plant products for cancer prevention. His publications identifying silibinin as a strong antiproliferative and differentiative agent for prostate cancer cells have resulted in a Phase 2 clinical trial of silibinin in prostate cancer patients. Zi is also developing novel preventive agents for patients with superficial bladder tumors to prevent recurrence and progression of this disease. These agents may also prevent bladder cancer in those who work in high-risk industries or engage in high-risk activities such as smoking. He is the inventor of flavokawains for bladder cancer prevention and treatment.

His project on flavokawains has been funded by the National Cancer Institute (part of the National Institutes of Health). He is also studying the biological roles of secreted Wnt antagonists in prostate and bladder cancer progression. His study on secreted Wnt antagonists may lead to new therapeutic and/or preventive approaches for bladder and prostate cancer.

Principal Investigator on NIH and DOD Research Grants

National Institutes of Health
1R01CA122558-01A2
12/1/2007-11/30/2012
NIH/NCI
Chemoprevention of urinary bladder carcinogenesis by flavokawain A
1R21CA152804-01A1  04/01/2011-03/31/2013
NIH/NCI
Rhodiola Rosea Extracts, Salidroside and Bladder Cancer Chemoprevention
Department of Defense
PC100869  01/01/2011-12/31/2014
DOD/Prostate Cancer Research Program
Co-targeting VEGF and Neuropilins with bevacizumab and secreted Wnt inhibitors in prostate cancer
UC Irvine Institute for Clinical and Translational Sciences
Pilot Award
12/6/2010 - 3/31/2011
Inhibition of pro-invasive effects of anti-VEGF therapy by secreted Wnt antagonists

Xiaolin Zi, PhD
Department of Urology

IRB Protocols

1999-272 UCI 97-18: A Randomized, Placebo-Controlled, Double-Blind, Phase IIb Chemoprevention Trial of Difluoromethylornithine in Brothers and First Cousin Males of Familial Prostate Cancer Proband. Anne Simonneau, MD

1998-84 Outcomes and Assessment of Prostate Cancer at UCIMC. Thomas Ahlering, MD

2000-1296 Retrospective Evaluation of Prostate Cancer Clinical and Pathological Outcomes. Thomas Ahlering, MD

2002-2657 Minimally Invasive Surgery (MIS) Skills and Performance Assessment. Elspeth McDougall, MD

2003-3125 Assessment of Minimally Invasive Surgery for Postgraduate Mini-Fellowship Program. Elspeth McDougall, MD

2004-3515 prospective Randomized Trial of Floseal Tubeless Exit vs. Cope Loop Nephrostomy vs. Fascial Stitch Following Percutaneous Nephrolithotomy. Jaime Landman, MD


2005-4429 Evaluation of Predictive Signatures of Prostate Cancer. Philip Carpenter, Atreya Dash, MD


2006-5386 CIRB - ECOG E2805: ASSURE: Adjuvant Sorafenib or Sunitinib for Unfavorable Renal Carcinoma. John Fruehauf, Elspeth McDougall, MD

2007-5720 Vesicare (Solifenacin) in the Treatment of Urinary Incontinence after Radical Prostatectomy. Thomas Ahlering, MD

2007-5818 Twenty Four Hour Urine Parameters and Stent Encrustation: Can We Predict the Patients Who Are Prone to Encrustation? Jaime Landman, MD

2008-6397 Hypothermic Nerve Sparing Radical Prostatectomy. Thomas Ahlering, MD

2008-6418 Incidence of Fluoroquinolone Resistant Enterobacteriaceae in Patients Undergoing Repeat Ultrasound Guided Prostate Biopsy. Atreya Dash, MD

2009-6735 Differences in Immunologic Response to Cryoablation versus Radiofrequency Ablation in the Treatment of Renal Cell Carcinoma. Jaime Landman, MD

2010-7396 CAISIS Research Database. Atreya Dash, MD

2010-7506 The Transition from Acute to Chronic Postoperative Pain in the Pediatric Patient - CHOC MOU. Michelle Fortier, Antoine Khoury, MD

2010-7518 Pilot Study Testing the Use of Urinary Biomarkers during Renal Surgery - A Potential Method of Analyzing Renal Ischemia Non-Invasively. Jaime Landman, MD

2010-7520 CREOES Renal Mass. Jaime Landman, MD

2010-7716 Retrospective Chart Review of Patients Who Underwent Urethral Stricture Surgery. Joel Gelman, MD, Thomas Ahlering, MD

2010-7772 Urinary Nerve Growth Factor as a Predictor of Imperforated or Prolonged Post Prostatectomy Incontinence. Thomas Ahlering, MD

2010-7818 Is T1/2 (Lasix Renal Scan) an Important Factor to Consider in Surgical Decision Making for Obstructive Uropathy? Hak Lee, MD, Antoine Khoury, MD

2010-7880 Tracking Renal Tumors After Cryoablation Evaluation of Lower Urinary Tract Function in Mice. Gamal Ghoniem, MD

2010-7741 Naturally Occurring Compounds (Lycopene, Flavokawain & Docetaxel) in Prostate Cancer Treatment. Xiaolin Zi, PhD

2010-7801 Cotargeting VEGF and Neuropilins with Bevacizumab Flavokawain & Docetaxel in Prostate Cancer Treatment. Xiaolin Zi, PhD

2010-7727 CAISIS Research Database. Atreya Dash, MD

2010-7735 Differences in Immunologic Response to Cryoablation versus Radiofrequency Ablation in the Treatment of Renal Cell Carcinoma. Jaime Landman, MD

2011-3027 Preoperative Warm-Up Exercises to Improve Laparoscopic Performance. Jaime Landman, MD

2011-3007 In Vivo Cryoprobe Evaluation (ICE) Study. Jaime Landman, MD

2011-3027 Open vs. Robotic-Assisted Radical Cystectomy: A Randomized Trial. Atreya Dash, MD

2011-3010 CO2 Laser in Prostate Cancer Treatment. John Fruehauf, Atreya Dash, MD

2011-3034 Retrospective Chart Review of Patients Who Underwent Urethral Stricture Surgery. Joel Gelman, MD, Thomas Ahlering, MD


2011-3027 Preoperative Warm-Up Exercises to Improve Laparoscopic Performance. Jaime Landman, MD

2011-3027 Open vs. Robotic-Assisted Radical Cystectomy: A Randomized Trial. Atreya Dash, MD

2011-8621 A Randomized, Double-Blind, Parallel, Placebo Controlled, Phase 4, Multicenter Study to Assess Efficacy and Safety of VESticare® (Solifenacin Succinate) to Improve Urinary Continence of Subjects after Robotic Assisted Radical Prostatectomy. Thomas Ahlering, MD


2011-8643 Renal Cytoreduction: A Retrospective Multicenter 5-10 year Follow-up Study. Jaime Landman, MD

2011-8621 Open vs. Robotic-Assisted Radical Cystectomy: A Randomized Trial. Atreya Dash, MD

Department of Urology

IACUC Protocols

Evaluation of Lower Urinary Tract Function in Mice. Gamal Ghoniem, MD

2002-2354 Testing of New Urologic and Laparoscopic Instruments. Jaime Landman, MD

2004-2528 Signaling Mechanisms of Wnt Inhibitors in Prostate Cancer Development. Xiaolin Zi, PhD

2004-2529 Wnt Signaling in the Progression of Bone and Soft Tissue Sarcoma. Bang Hoang, Xiaolin Zi, PhD

2004-2540 Chemoprevention of Urinary Bladder Carcinogenesis. Xiaolin Zi, PhD

2007-2745 Inhibition of Prostate Carcinogenesis by Flavokawain B. Xiaolin Zi, PhD

2007-2741 Naturally Occurring Compounds (Lycopene, Flavokawain & Docetaxel) in Prostate Cancer Treatment. Xiaolin Zi, PhD

2010-2953 Aerosol Transfer of Bladder Urothelial and Smooth Muscle Cells onto Demucosalized Colonic Segments for Porcine Bladder Augmentation in Vivo: Long Term and Functional Results. Antoine Khoury, MD

2010-2956 Testing of a New Laparoscopic Surgical Instrument: A Novel Dual Laser for Cutting and Hemostasis. Hak Lee, MD, Jaime Landman, MD

2011-2983 Cotargeting VEGF and Neuropilins with Bevacizumab and Secreted Wnt Inhibitors in Prostate Cancer. Xiaolin Zi, PhD

2010-3007 In Vivo Cryoprobe Evaluation (ICE) Study. Jaime Landman, MD

2011-3016 Pilot Study Comparing Needleless Pyeloplasty versus Single Incision Pyeloplasty (Transcatheter SPIDER) versus Laparoscopic Pyeloplasty in a Pig Model. Jaime Landman, MD

Department of Urology

Research
Robot-assisted radical prostatectomy


Prostate cancer

Karmi Chamie, MD; Timothy J. Daskivich, MD; Lorna Kwan, MPH; Jessica Labo, BA; Atreya Dash, MD; Sheldon Greenfield, MD; and Mark S. Litwin, MD, MPH. Comorbidities, treatment and ensuing survival in men with prostate cancer. J Gen Intern Med. 2012 May;27(5):492-9.


Prostate cancer (continued)

Timothy J. Daskivich, MD; Karim Chamie, MD; Lorna Kwan, MPH; Jessica Labo, BA; Atreya Dash, MD; Sheldon Greenfield, MD; and Mark S. Litwin, MS, MPH. Comorbidity and competing risk for mortality in men with prostate cancer. Cancer 2011; 117 (20): 4642-50.


Urologic oncology research


Bladder cancer

Crates, M and Ghoniem, G. Bladder mass "collagenoma". IUJ Volume 22, Number 5, 2011, pp. 621-623(3).


Strictures

Incontinence / UTI


Pelvic reconstructive surgery


Renal surgery


Kidney stones


Endourology


Surgical training modalities


Surgical training modalities (continued)


2011 World Congress highlights

AUA laparoscopic surgery skills curriculum

Postgraduate urologists practice patterns
World Congress of Endourology
Istanbul, Turkey
Sept. 4-8, 2012

Posters
Joseph Graversen, MD
Awarded: First Place
This poster won first place in basic science for the entire international conference of over 2500 participants. Intra and Extra-Renal Autonomic Nervous System Redefined.
A Lusch, JA Graversen, J Wikenheiser, C Abdelshiekh, R Alipanah, S Quach, JP Zarraga, I Gerbatech, J Landman

Lectures
Jaime Landman, MD
Sept. 5 - Management of Complications & Post Ablation Recurrence
Ralph Clayman, MD
Sept. 7 - Plenary Session: STATE-of-ART Lecture - Standardized Reporting of Complications in Urology
Thomas Ahlering, MD
Sept. 6 - Management of Complications after RALP
Sept. 8 - Complications and Management in RARP

Round Table Discussion
Jaime Landman, MD
Sept. 5 - Renal Mass - How to Treat It: “Active Surveillance”

Thomas Ahlering, MD
Sept. 8 - Panel - Robot-Assisted Radical Prostatectomy

Courses
Jaime Landman, MD
Sept. 6 - Cook/Karl Storz Hands On Training Lab
Ralph Clayman, MD
Sept. 6 - Renal Cryoablation: Image Guided Therapies
Session: Update on Treatment of the Small Renal Mass
Jaime Landman, MD
Sept. 6 - Image Guided Therapy Working Group

Posters/Videos
Thomas Ahlering, MD
Sept. 6 - Robot/Robotic/Laparoscopic Prostate
Jaime Landman, MD
Sept. 7 - Moderator: New Technology

Live Surgery
Thomas Ahlering, MD
Sept. 8 - Robot-Assisted Radical Prostatectomy

American Urological Association Annual Meeting - Atlanta, Ga
May 19-23, 2012

Abstracts
Thomas Ahlering, MD


Posters
Atreyu Dash, MD
Awarded: Best Poster
May 20 - Matching Tumor Risk with Aggressiveness of Treatment in Men with Severe Comorbidity and Non-Metastatic Prostate Cancer. TJ Daskivich, K Chamiie, A Dash, S Greenfield, MS Litwin

Thomas Ahlering, MD
May 20 - Moderator: Prostate Cancer Localized III

Podium
Atreyu Dash, MD - senior author
Michael Liss, MD - presenting author
May 19 - Podium presentation: Total Illness Burden Index for Prostate Cancer (TIB-CaP) - Prior to Prostate Biopsy can Predict Other Cause Morbidity

Michael Liss, MD
May 19 - Targeted Prophylaxis Prior to Transrectal Prostate Biopsy: A Comparison of Broth Enrichment to Direct Plating for the Evaluation of Rectal Cancers. Liss M, Nakamura K, Peterson E

Aaron Spitz, MD
May 21 - Moderated video session - Infertility, Sexual Dysfunction, Trauma and Teaching Techniques

Lectures
Gamal Ghoeniem, MD
May 21 - Egyptian Urological Society - Scientific Program - Update on OAB Treatment

Elspeth McDougall, MD
May 18 - AUA Health Policy Council: Delegate to AMA

Guy Hidas, MD

Research Study
Elspeth McDougall, MD
BLUS EDGE Validation Study. Participants are experienced laparoscopic surgeons. The study purpose is to measure expert performance to use as a benchmark for residents training on the simulator.
The Department of Urology faculty continue to provide timely and up-to-date training programs

**Community Outreach**
Monthly - High School Outreach
UC Irvine Summer Premed Program
July 18-29, 2011
June 18-29, 2012
July 9-20, 2012
July 23-Aug. 3, 2012
Aug. 4-6, 2011
Middle School Student Exchange
UC Irvine Summer Surgery Program
July 9-20, 2012

**Urology Department**
Weekly - Urology Grand Rounds
Weekly - Resident Tutorial Conference
Aug. 13, 2011
Urology Residents' Robot-Assisted and Laparoscopic Renal & Bladder Surgery Course (hemostasis)
Sept. 22-24, 2011
Urology Visiting Professor, Dr. Stephen Nakada
Dec. 10, 2011
Urology Residents' Robot-Assisted and Laparoscopic Renal & Bladder Surgery Course (hemostasis)
Jan. 7, 2012
Dr. McDougall - UC Irvine Medical Student II Urology Course - Urology Focus Event
April 13, 2012
Dr. Ghoniem - Female Pelvic Reconstruction & Incontinence for urology residents
May 10-11, 2012
Dr. McDougall - UC Irvine Medical Student Genitourinary Skills Training Program for 2nd Year Medical Students
June 16, 2012
Urology Residents' Robot-Assisted and Laparoscopic Renal & Bladder Surgery Course (Sealants, Adhesives)
June 18, 2012
Grand Rounds visiting guest lectureship, "Geriatric Urology," George W. Drach, MD, FACS
July 14, 2012
Urology Residents' Abdominal Open Access Surgery Course (Energy Devices)

**International**
Ongoing - Urologic Surgery Mini-Fellowship
Oct. 28, 2011
AUA Ultrasound Course
Oct. 29-30, 2011
AUA Tissue Ablative Course: Kidney and Prostate
January 25-28, 2012
AUA Advanced Robotic Oncology Course
March 23-24, 2012
Dr. Ghoniem - IUGA Regional Symposium: Female Pelvic Floor Disorders
June 11-15, 2012
Mini-Fellowship Robotic Prostatectomy

**New training program for urologic nurse practitioners as surgical assistant**
The new course for nurses has been developed by urologic surgeons Dr. Elspeth McDougall, Dr. Thomas Ahlering and Dr. Gamal Ghoniem, faculty of the UC Irvine Department of Urology. This is a robust and comprehensive hands-on laparoscopic and robot-assisted laparoscopic training curriculum, with a focus on laparoscopic surgery, to prepare nurses to be proctored during surgical cases. Completion of the AUA Web-based training program for robotics and laparoscopy will be utilized. As such, AUA membership will be required in the APN/PA membership category.

**Objectives:** At the completion of the Nurse Practitioner (NP) Robot-Assisted Urologic Surgery Training Program, the trainee will be able to:
- Describe patient positioning, equipment setup, port placement, pre-operative patient preparation for laparoscopy and robot-assisted surgery.
- State the indications and contraindications for laparoscopy and the robotic approach to urologic surgical procedures.
- Identify errors that can occur during laparoscopy and for the robotic surgery conditions.
- Describe the steps involved with safe operation of the da Vinci Surgical System (Intuitive Surgery, Inc., Sunnyvale, CA).
- Describe the surgical steps involved with the safe performance of commonly performed robotic urologic surgery.
- Describe complications that can occur during urologic surgery and describe methods to avoid and manage the complications.
Residency Program

In 2011, UC Irvine's urology residents received an iPad loaded with these important educational tools:
- AUA Urology CORE Curriculum
- Journal of Endourology
- Campbell's Urology textbook access
- Online ACGME case logs
- Online work hour logs
- Online surgical evaluations
- Presentation tools
- Weekly quizzes

Congratulations to urology resident Dr. Adam Kaplan for winning a SUCPD grant, which will be used to expand the urology residents' iPad project. This will allow the iPad to become a mobile training device.

New AUA innovative laparoscopic skills training platform

The AUA Basic Laparoscopic Urologic Surgery (BLUS curriculum) handbook and cognitive multiple-choice exam is now available online.

As part of the Department of Urology residency training curriculum, the urology residents will participate in the BLUS curriculum and be tested monthly during their residency, noting changes in performance parameters within the four basic laparoscopic skills tasks. The scores will be recorded on the AUA database.

The SimuLab EDGE device will be used as part of the AUA BLUS validity study.

Biomedical and Translational Science Master of Science Degree Program (MS-BATS) now available for urology residents

MS-BATS is an exciting clinical research training program at UC Irvine offered by the School of Medicine. It is a flexible program designed to prepare scientists in the conduct of interdisciplinary clinical research. It is aimed at junior faculty in clinical departments, fellows, residents, fourth-year medical students, physicians and others with a solid basic science foundation who are interested in developing the skills needed to conduct, interpret, evaluate and apply clinical research.

UC Irvine Department of Urology four-year curriculum for urology residency training

A standardized curriculum for residents in urology surgical training has been developed by Dr. Elspeth McDougall and ongoing since 2007. A template for a cognitive and basic skills curriculum covers the four years of urology residency training, including weekly one-hour, year-specific education sessions.

Scores from the American Urological Association In-Service Examination were reviewed to assess resident performance before and six months after implementation of the four-year curriculum. Resident and faculty questionnaires were used six months after incorporating the curriculum to evaluate the usefulness and value of the new curriculum. The average In-Service Examination results following the introduction of the four-year curriculum were 10% to 27% higher than the previous four years of examination results.

The experience with a structured four-year curriculum for urology residency training has been favorable for residents and faculty and offers a platform for debate and discussion.

The Department of Urology offers a two-year fellowship training program in minimally invasive urologic surgery

**Overview**
The minimally invasive urology fellowship program at University of California, Irvine is an Endourology Society-sanctioned fellowship specifically tailored to train future leaders in the world of minimally invasive urologic surgery. This intensive two-year program is designed to allow the graduating fellow to have advanced technical skills in laparoscopy, endoscopy, ESWL and stone disease and robotic surgery, optimizing patient outcomes with minimally invasive surgical techniques. The fellowship also focuses on developing minimally invasive thinking processes such that the fellow, after graduation, can advance the future of minimally invasive urology. Research training is focused on creative and dynamic innovation, study design, and execution and professional presentation.

**Program Description**
This is a two-year fellowship with a clinical instructor appointment. During both years, the fellow is expected to take call on the faculty rotation usually once every five weeks. The first year is 80% in the laboratory and 20% clinical with time spent at the Long Beach Veterans Administration Hospital as well as at UC Irvine Medical Center. The second year is 80% clinical and 20% clinical research. The endourology fellows are considered team leaders for laboratory and clinical research and directly manage undergraduate students, medical students, as well as international visiting scholars. The fellows lead their section of the weekly laboratory meeting, sharing the latest progress of existing projects and brainstorming ideas for initiating new studies.

**Laboratory Research**
The technical training and investigative components of the fellowship are enhanced by unique world-class laboratory resources. The laboratory incorporates four distinct training facilities: a survival operative suite and animal vivarium, a non-survival operative suite with six operative stations, a surgical simulation and laparoscopic trainer suite, and a fresh tissue laboratory with an additional four operative stations. The available facilities with advanced surgical equipment allow potential for any and all experiments to be performed. Within the surgical simulation and laparoscopic trainer suite, there are six laparoscopic pelvic trainers with accompanying laparoscopic instruments, laparoscopic virtual reality trainers, robotic virtual reality trainers, a percutaneous renal access simulator, an endoscopy simulator and many items of endourology equipment. Expert full-time laboratory staff is available to optimize productivity in the four laboratories. The laboratory enables dynamic and innovative research that can often rapidly be translated into clinical practice. The extensive laboratory facility lends itself to collaborative projects with faculty from other departments within UC Irvine, allowing fellows to expand their creative potential.

**Fellowship Directors**
The fellowship is directed by Dr. Jaime Landman. In addition, the fellow works closely with Dr. Atreya Dash and Dr. Thomas Ahlering in minimally invasive urological oncology, and with Dr. Elspeth McDougall in endourology, surgical simulation, and surgical education.

For more information contact
Jaime Landman, MD
Professor of Urology and Radiology
Chair, Department of Urology
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Email: landmanj@uci.edu

Apply online, visit the Endourological Society website
www.endourology.org/
Department of Urology and Department of Obstetrics & Gynecology offer an accredited two-year fellowship training program for urology residents in female pelvic medicine and reconstructive surgery (FPMRS)

Academics
The Female Pelvic Medicine and Reconstructive Surgery (FPMRS) Fellowship in the Division of Urogynecology / Department of Obstetrics & Gynecology and Department of Urology at the University of California, Irvine is accredited by the American Board of Obstetrics and Gynecology (ABOG). This two-year fellowship program takes place at UC Irvine Medical Center and affiliate sites. Fellows are trained in the clinical setting as well as in the research laboratory. Our program shares a unique collaboration among these departments at UC Irvine — Department of Urology; Department of Obstetrics & Gynecology, Division of Urogynecology; Department of Surgery, Division of Colon and Rectal Surgery. The primary goal of our program is to produce specialists who are prepared to provide consultation and comprehensive management of women with complex pelvic conditions, lower urinary tract disorders and pelvic floor dysfunction. Comprehensive management includes those diagnostic and therapeutic procedures necessary for the total care of the patient with these conditions. As such, the program is designed to ensure that the fellow successfully completing the program is well equipped for eventual subspecialty certification with the American Board of Obstetrics and Gynecology (ABOG) / American Board of Urology (ABU). Our program strives to achieve all of the educational objectives set forth by ABOG.

The strengths of our program are:
- A jointly shared program between an academic medical center and a large established community hospital.
- A unique collaboration between urology, urogynecology and colorectal surgery.
- Diverse primary and associated faculty with a tremendous depth and breadth of clinical and academic experience including: fellowship-trained urologists, urogynecologists and colorectal surgeons, together with pelvic floor physical therapists. Additional contributions to our program come from our unique relationship with allied services including: gastroenterology, a dedicated pelvic floor radiologist and a nationally recognized geriatrics program.
- UC Irvine is consistently rated among the best urology departments in the country.
- Highly ranked urology and obstetrics and gynecology research with established NIH funding.

Application Procedure
All applicants should have satisfactorily completed an obstetrics and gynecology residency approved by the American Council for Graduate Medical Education (ACGME) or the Council of the Royal College of Physicians and Surgeons of Canada (CRCPSC).

Applications are accepted between May 1 and July 25 of the year prior to matriculation. All completed files will be reviewed during the last week in July, and qualified applicants will be offered interviews taking place between August 1 and September 20. Applicants can download the fellowship application and submit the following required documentation:
- Current curriculum vitae
- A personal statement addressing why you are interested in this fellowship
- Current correspondence address(es) including your home and work phone numbers
- Three letters of reference from physicians with whom you have worked, one of whom should be your department chair or residency director
- 2x2 picture attached to the application.
- An interview will be required for consideration.

Urology Mentor
Gamal Ghoniem, MD, FACS
Director
Karen L. Noblett, MD
Division of Urogynecology
UC Irvine Medical Center
Dept. of Obstetrics and Gynecology

Visit the urogynecology web site
www.obgyn.uci.edu/urogynecology-academics.html

Gamal M. Ghoniem, MD, FACS
Professor of Urology
Vice Chair, Department of Urology

Female Pelvic Medicine Reconstructive Surgery (FPMRS)

Problems such as irritable bladder, urinary incontinence and pelvic organ prolapse are increasingly common among older female patients. Other problems, such as interstitial cystitis or spinal cord injury that affect bladder control, can arise at any age. To treat these disorders, Dr. Ghoniem uses a wide range of surgical and nonsurgical techniques, including modern fluoroscopy-video-urodynamic testing, which determines the precise causes of blocked urine flow or leakage. He also uses minimally invasive procedures to restore weakened pelvic tissue seen in pelvic organ prolapse. To treat cases of severe overactive bladder, Dr. Ghoniem has mastered the technique of implanting electronic stimulators to aid in normal bladder function.
CHOC Children’s is nationally ranked by U.S. News & World Report for pediatric urology

The Department of Urology welcomes new faculty members

Dr. Gordon McLorie is an internationally recognized authority in pediatric urology. He earned his medical degree and graduated from the urology residency program at the University of Toronto. After residency training, he completed a fellowship in oncology at University of California, Los Angeles and in pediatric urology at Harvard Medical School Boston Children’s Hospital. Dr. McLorie spent 20 years at the Hospital for Sick Children in Toronto, where he became recognized for excellence in reconstructive surgery, pediatric urological oncology and renal transplantation. In 2002, Dr. McLorie held the Bicknell Endowed Chair in Pediatric Urology and was chief of pediatric urology at Wake Forest University School of Medicine in North Carolina to manage the clinical aspects of the tissue-engineered bladder and regenerative medicine research laboratory.

He is currently principal investigator in the NIDDK-sponsored RIVUR trial, a randomized study of children with urinary tract infections and vesicoureteral reflux. He is also an investigator in the recently completed study of regenerative bladder augmentation using autologous bladder constructs. Dr. McLorie has more than 200 peer-reviewed manuscripts and book chapters to his credit. He is a sought-after speaker who has delivered numerous state-of-the-art lectures at major universities and national and international scientific gatherings. He is internationally recognized for his expertise in reconstructive surgery, particularly hypospadias repairs, bladder extrophy and incontinence surgery.

He has made significant contributions to pediatric urological oncological literature, especially on Wilms tumor.

Dr. Irene McAleer completed her pediatric urology fellowship at University of California, San Diego after successfully finishing her urology residency at the Naval Medical Center, Bethesda, Md. She is certified by the American Board of Urology with a subspecialization certificate in pediatric urology. She has practiced pediatric urology for more than 20 years, in addition to publishing more than 65 journal articles and book chapters.

She has a particular interest in antenatal genitourinary conditions, medical and surgical management and diagnosis of vesicoureteral reflux, urinary obstruction and duplication, hypospadias and intersex reconstruction, as well as an interest in endoscopic treatment of pediatric stone disease.

Other non-medical education experience includes obtaining a master of business degree from University of California, Los Angeles and in pediatric urology at Harvard Medical School Boston Children’s Hospital. Dr. Gordon McLorie is an internationally recognized authority in pediatric urology. He earned his medical degree and graduated from the urology residency program at the University of Toronto. After residency training, he completed a fellowship in oncology at University of California, Los Angeles and in pediatric urology at Harvard Medical School Boston Children’s Hospital. Dr. McLorie spent 20 years at the Hospital for Sick Children in Toronto, where he became recognized for excellence in reconstructive surgery, pediatric urological oncology and renal transplantation. In 2002, Dr. McLorie held the Bicknell Endowed Chair in Pediatric Urology and was chief of pediatric urology at Wake Forest University School of Medicine in North Carolina to manage the clinical aspects of the tissue-engineered bladder and regenerative medicine research laboratory.

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Community Outreach

The mission is to stimulate young minds and encourage students to expand their horizons by considering a possible career in medical research, biotechnology, clinical medicine or healthcare.

Orange County High School Outreach
- Began 2008, bimonthly event, 40 students per session
- 63 Orange County high schools
- Urology Leadership Council, urology faculty
The High School Outreach program is a half-day program in which 20 juniors and seniors receive interactive, hands-on experience with the latest technological advances in minimally invasive surgery in the UC Irvine Surgical Education Center. The students also have an opportunity to meet and discuss career pathways with surgeons, residents and medical students.

High School Summer Premed Program
- Began 2010, 40 students per session
- Summer program, 3 sessions
- School of Medicine faculty lectures, hands-on training
- UC Irvine Simulation Center & Surgical Education Center
This is a two-week program designed to foster the interest of high school students in medical careers and demonstrate what it’s like to be a medical student. The program combines didactic lectures given by faculty members and hands-on workshops providing exposure to the medical field.

High School Summer Surgery Program
- Began in 2012, 12 students per program
- Summer program, 1-2 sessions
- Exposure to surgical skills and surgical techniques
- Education about the latest surgical technology and virtual reality simulators
- Collaboration with world-class surgeons
This two-week program combines didactic lectures given by distinguished UC Irvine faculty members, hands-on laboratory workshops in open, laparoscopic and robotic surgery and live case observation in the operating room, providing a first-rate exposure to the field of surgery.

National Middle School Exchange Program
“Doctors for a Day”
- 4-day event, beginning in August 2011
- 11 students - Brooklyn, NY
- 11 students - Boys & Girls Club, Anaheim, CA
This program is a collaboration between UC Irvine, FAMIS, Beginning with Children Foundation of Brooklyn, and the Boys & Girls Club of Anaheim. Eleven students from the Beginning with Children Charter School in New York City are partnered with 11 children from the Boys and Girls Club of Anaheim for a four-day educational program. The program includes lectures and laboratory experiences designed to challenge and stimulate the children to think about science and minimally invasive surgery. There are hands-on learning sessions in the surgical education center (da Vinci robot, laparoscopic trainer and virtual reality laparoscopic simulator) and workshops on open suturing, vital signs and ultrasound.

Robots are Cool
- Annual event beginning in 2007
- 300 community guests per event
- Free scrubs for children, In-N-Out truck
- Use of the da Vinci robot and surgical simulators in the UC Irvine Surgical Education Center
This is a free event for the community held at UC Irvine Medical Center and hosted by the Department of Urology Leadership Council as an opportunity to introduce young people to the world of robotics and the latest in cutting-edge technologies used in medicine and surgical procedures.