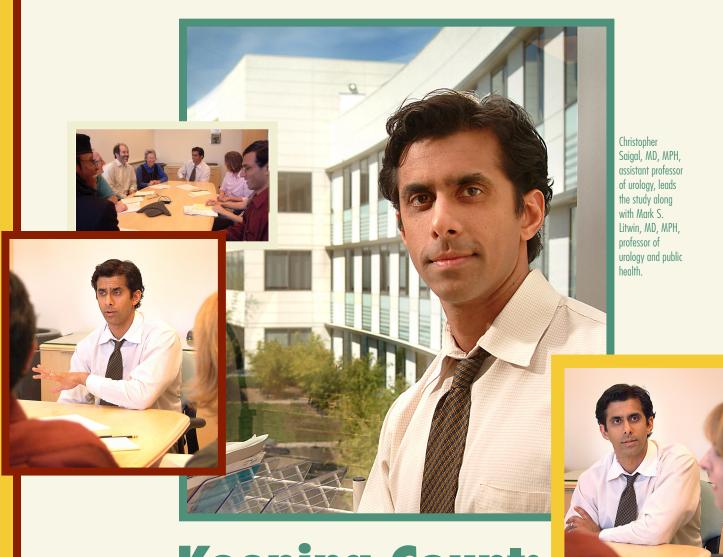
Chrological Center

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Keeping Count:The Burden of Urologic Diseases

or common health conditions ranging from diabetes and obesity to digestive diseases and many cancers, a vast body of literature describes the "burden" in terms of such measures as health impact, cost, and the most-affected population groups, as well as trends in prevalence and treatment. For urologic diseases, though, there has been no single resource for understanding the human and financial impact – despite the fact that conditions such as benign prostatic hyperplasia, erectile dysfunction, urinary incontinence and urinary tract infections are among the U.S.'s most common afflictions.

newsletter

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Upcoming Events

UCLA SPORE in Prostate Cancer Annual Meeting May 9, 2005

> **UCLA Urology Residency** Graduation June 10, 2005

Newsletter Staff:

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David Geffen School of Medicine at UCLA Department of Urology

Kudos:



associate professor of urology, received a five-year, \$1,353,522 ward from the National Institutes of Health for "Gene-Based" Imaging and Therapy to Target Metastatic Prostate Cancer," which aims to develop an efficient and safe gene therapy protocol

tailor-made to treat prostate cancer even in the aggressive, metastatic stage. In addition, she received a \$90,000 seed grant from The Susan G. Komen Breast Cancer Foundation for a new project entitled "Use of Molecular Imaging and Genetic Approaches to Investigate the Role of Tumor Lymphangiogenesis in Breast Cancer Metastasis."



assistant professor of urology, received a \$30,000 seed Rodríguez, MD, grant from the Fishbein Foundation for her research on "Traditional Chinese Medicine and Acupuncture in on "Traditional Chinese Medicine and Acupuncture in the Treatment of Interstitial Cystitis (IC): Relationship

of Outcome to Modulation of the Stress Response System." Interstitial cystitis (IC) is a bladder syndrome characterized by chronic urinary urgency, frequency, and pelvic or bladder pain and affects more than 500,000 American women. Traditional Chinese Medicine (TCM) emphasizes that emotional well-being and physical health are linked. Dr. Rodríguez proposes that patients with IC suffer from imbalances in the normal response to stress and physical and emotional stimuli, making them more prone to experience pain and urinary symptoms of bladder irritation. Therefore, she plans to study the differences in responses to fear and stress in patients with IC and those without it.

Dr Rodríguez also received the Basic Science Essay Award at the 2005 Annual Meeting of the Society for Urodynamics and Female Urology for her essay entitled "New Objective Measures to Quantify Stress Urinary Incontinence in a Novel Durable Animal Model of Intrinsic Sphincter Deficiency."



postdoctoral fellow in urological health services research, has been awarded grants from both the Kidney and Urology Foundation of America and the American Foundation for Urologic Disease totaling \$60,000 for her projects related to "The Impact of Provider Volume on Outcomes Following Pubovaginal Sling Surgery."



urologic oncology fellow, received a 2005 ASCO Foundation Merit Award from the American Society of Urologic Oncology for his abstract entitled "Expression of the Vascular Endothelial Growth Factor Family in Tumor Dissemination and Disease-Free Survival in Clear Cell Renal Cell Carcinoma." The Merit Award, established in 1985 to recognize quality abstracts submitted by fellows, provides a \$1,500 stipend.



7 hang, DDS

Rong Zhang, DDS, PhD, was one of only 15 fellows awarded by Dr Roberto Peccei, UCLA's Vice Chancellor for Research, with an outstanding postdoctoral fellowship award nomination. Dr Zhang was awarded for her work as a fellow with Dr Larissa Rodriguez, assistant professor of urology, and for her overall accomplishments at UCLA.



he Department of Urology is committed to ongoing research in a quest to develop new treatments and cures for all urologic conditions. It is our goal to focus on basic and population-based research with the hopes that we can rapidly translate the findings into clinical trials and community applications. Currently, 13 clinical trials are open for enrollment and available to patients. For additional program information, please contact the Clinical Trials Office at (310) 825-4415.

Prostate Cancer:

endreon 9902b: A Randomized, Double-Blind, Placebo
Controlled Trial Of Immunotherapy with White Blood Cells Loaded with Provenge in Asymptomatic Subjects with Gleason Sum ≤ 7, Metastatic, Androgen-Independent Prostatic Adenocarcinomas (Pl: Allan J. Pantuck, MD/Co-Pl: Arie Belldegrun, MD)

This Phase III cancer vaccine study for men with hormone-refractory prostate cancer uses a patient's own white blood cells to stimulate their immune system to fight their cancer. The patient's cells are drawn, processed with the fusion protein Provenge, and then returned to the patient.

Dendreon Corporation announced in February that Provenge, the company's investigational immunotherapy for the treatment of prostate cancer, significantly improved survival in men with asymptomatic, metastatic androgen-independent (hormone-refractory) prostate cancer when compared to patients receiving placebo. According to the final three-year intent-to-treat analysis of the company's first randomized Phase III clinical study, known as Study D9901, patients receiving Provenge had a 4.5 month improvement in their median survival and a greater than threefold increase in survival at 36 months when compared to patients receiving the placebo.

A Study to Determine the Effect of a Medication in Newly Diagnosed, High-Risk Patients Undergoing Radical Prostatectomy. (PI: Charles Sawyers, MD/Co-PI: Robert E. Reiter, MD)

Survivor Health-Related Quality of Life and Spouse Satisfaction After Prostate Cancer Therapy (PI: Christopher Saigal, MD/Co-PI: Mark Litwin, MD, MPH)

Chemotherapy Combination for Patients Who Have Stopped Responding to Hormone Treatment (Pl: Allan J. Pantuck, MD/Co-Pl: Arie Belldegrun, MD)

Bladder Cancer:

hase III Clinical Trial of Green
Tea Extract and Tarceva to
Prevent Clinical Bladder Cancer
Recurrence in Former Smokers at High
Risk (Pl: Allan J. Pantuck, MD/Co-Pl: Arie
Belldegrun, MD, Robert A. Figlin, MD)

Kidney Cancer:

Randomized Double Blind
Phase III Study to Evaluate
Adjuvant cG250 Treatment Versus
Placebo In Patients with Clear Cell
Renal Cell Carcinoma and High Risk Of
Recurrence (PI: Arie Belldegrun, MD/CoPI: Robert A. Figlin, MD)

A Multi-Center, Randomized Phase III Study of Adjuvant Oncophage Versus Observation in Subjects with High Risk of Recurrence After Surgical Treatment for Renal Cell Carcinoma (PI: Robert A. Figlin, MD/Co-PI: Arie Belldegrun, MD)

A Phase II, Randomized Study Comparing Tarceva with Avastin to Avastin Plus Placebo for Patients Whose Kidney Cancer Has Spread (PI: Robert A. Figlin, MD/Co-PI: Arie Belldegrun, MD)

A Phase II, Three-Arm, Randomized, Open-Label Study of Interferon Alfa Alone, CCI-779 Alone, and the Combination of Interferon Alfa and CCI-779 in First-Line Poor Prognosis Subjects with Advanced Renal Cell Carcinoma (PI: Robert A. Figlin, MD/Co-PI: Arie Belldegrun, MD)

A Phase III, Randomized Study of SU011248 Versus Interferon-a as First-Line Systemic Therapy for Patients with Metastatic Renal Cell Carcinoma (PI: Robert A. Figlin, MD/Co-PI: Arie Belldegrun, MD)

Pelvic Medicine, Incontinence and Reconstructive Surgery:

acral Root Neuromodulation for Pelvic Pain and Overactive Bladder (Pl: Larissa Rodriguez, MD/Co-Pl: Shlomo Raz, MD)

Evaluation of Family History and Genetic Predisposition for Development of Vaginal Prolapse (PI: Larissa Rodrìguez, MD/Co-PI: Eric Vilain, MD)

Evaluation of General Stress Response in Patients with Interstitial Cystitis (PI: Bruce Naliboff, MD/Co-PI: Larissa Rodriguez, MD)

3

A UCLA Department of Urology team is nearing the end of Urologic Diseases in America (UDA), a five-year, \$8 million effort funded by the National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health to quantify the burden of urologic diseases on the American public. The data they are compiling and reviewing were already in place, but represented an untapped patchwork of population-based studies, observational cohorts, national interview surveys, reviews of physician practice patterns, hospital system databases,

regional cancer registries, state health department information systems, and federal, state and private insurance claims-based datasets. "There is a wealth of information in these sources, but until you analyze the data and publish your findings, no one knows what's there," says Christopher Saigal, MD, MPH, assistant professor of urology, coprincipal investigator of the study at UCLA with Mark S. Litwin, MD, MPH, and principal investigator of the RAND team

By documenting, for the first time, trends in epidemiology, practice patterns, resource utilization and costs associated with urologic diseases, the researchers can go a long way toward ensuring that scarce funding for research and health care programs is allocated in the most efficient

that conducts the data analyses.

way possible. "Ultimately, we want to have a data reporting system in which we know where we're spending money, on whom, for what conditions, and how that's changing," Dr Saigal explains. "With that type of system, we can understand where the burdens are greatest, target resources, and think about what diseases are suitable for prevention efforts. We can identify disparities in care, assess the quality and cost of care and study the evolution of clinical guidelines and new therapies."

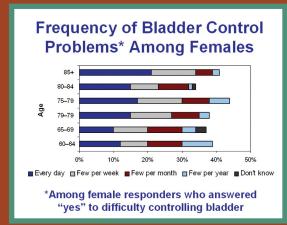
The UDA researchers – a team that includes epidemiologists, health economists,

statisticians, programmers, and urologists trained in health services research began their effort by looking for all potential sources of health data related to urologic diseases in the United States, and settling on those most likely to provide useful and reliable information. Next, they divided the scope of urologic practice into 12 areas for analysis. Four of those areas – urinary tract infection, urinary incontinence, benign prostatic hyperplasia (BPH), and urolithiasis

(kidney stones) – are covered in a recently released interim compendium posted on the National Institutes of Health Web site (http://kidney.niddk.nih.gov/statistics/uda/index.htm) and distributed to interested parties across the country. The final compendium, scheduled to be released next year, will include all 12 areas of interest. (The other eight: pre-natal hydronephrosis;

male reproductive health issues including erectile dysfunction, Peyronie's disease, infertility and undescended testis; urethral diseases including hypospadias and stricture; and cancers of the prostate, bladder, kidney and testis.)

After analyzing the data for the first four conditions, the UDA researchers convened a committee of academic physicians to offer feedback and write for the interim compendium on their clinical



areas of expertise. The compendium, aimed at a wide audience including the general public, policy-makers, non-governmental organizations, health care providers and academic researchers, includes specific recommendations for improving the current datasets so that researchers can provide additional insight in the future. "Our goal is not only to pull all of the existing information together, but also to explain where there are holes in that data and point the way toward new studies that could help to fill those gaps," Dr Saigal explains.

Among the four conditions studied

We are very pleased to announce the introduction of a new campaign that was created to raise awareness for UCLA's Department of Urology and the Department of Surgery. This joint campaign features print ads, radio spots, outdoor boards and a new Web portal page (www.surgicalservices.ucla.edu). The print ad can be found in Food & Wine, Travel + Leisure, Town & Country and InStyle magazines, while the radio spots can be heard on KFI (640 AM) and KFWB (980 AM). The campaign continues through May.

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for the interim compendium, urinary tract infection (UTI) exacts the greatest burden. UTI accounted for more than 5% of all U.S. hospitalizations and 1.6% of all emergency room visits in 2000. In 2000, there were an estimated 6.3 million office visits for women with UTI, and 1.8 million for men with UTI. Rates were highest among the oldest age groups, starting for men after 55 and for women after 65. The researchers also found that among Medicare beneficiaries, Hispanic men and women had the highest rates, with African Americans having the highest rates of UTI-related hospitalizations and emergency room visits.

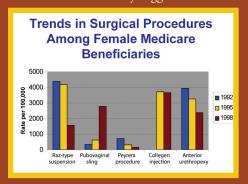
The interim compendium also documents UTI's substantial financial impact: For privately insured workers, expenditures averaged \$2,371 more for persons with UTI than for those without UTI in 1999, controlling for demographic and other health factors. For the nation as a whole, UTI treatment – excluding the cost of medication – rose from \$1.85 billion in 1994 to \$2.47 billion in 2000 for women, and from \$811 million in 1994 to \$1.03 billion in 2000 for men. UTI also affects approximately 3% of the nation's children each year, with inpatient hospital care on the rise.

Adult urinary incontinence (UI) was found to be among the most prevalent chronic diseases, though there were large variations in past estimates, depending on how incontinence was defined. Using data from the National Health and Nutrition Examination Survey, the UDA researchers found that 38% of women and 17% of men report having experiences

with UI. The problem is also significant in the pediatric population – an estimated 417,000 visits made to physician offices and hospital outpatient departments.

Among men, outpatient visits for BPH increased by nearly 50% from 1994 to 2000, from 10,116 per 100,000 (approximately one in 10) to 14,473 per 100,000 (one in seven). There were increases in the use of pharmacological therapy, and decreases in emergency room visits and inpatient surgical procedures such as transurethral rectal prostatectomy (TURP), open prostatectomy and balloon dilation.

For urolithiasis, the overall physician office visit rate nearly doubled between 1992 and 2000, the UDA researchers found. Among Medicare beneficiaries ages 65 and older, office visit rates increased 25%. Having kidney stones proved particularly expensive – private-sector expenditures for patients with the condition were \$4,500 per year more than for those without after taking into account other health, demographic and socioeconomic factors. "The fact that it's as significant economically as conditions like diabetes and obesity suggests that



efforts aimed at preventing kidney stones should be of greater interest to employers and insurers who want to reduce costs," Dr Saigal observes.

With data analysis nearly complete on the other eight urologic disease categories, the final compendium promises to shed light on many other previously undescribed phenomena. The researchers are already preparing a paper on one surprising finding, indicating that Hispanic men are at higher risk for erectile dysfunction than other ethnic subgroups.

For most of the common urologic conditions, the burden falls most heavily on the elderly. Given the aging of the U.S. population – within approximately 25 years, the number of U.S. residents 65 and older is expected to reach 70 million, roughly double the current total - the field of urology will face mounting challenges. Dr Saigal believes UDA can establish a framework for a data reporting system that would facilitate the most efficient and effective effort to tackle these challenges. "We hope that beyond this phase of UDA, which will end in 2006, there will be a renewal of this project that enables continual updates of this work as well as targeted analyses that can be useful for policy-makers by answering specific questions," he says.

For the present, the UDA publications – including not only the interim compendium, but also a professional series appearing in the *Journal of Urology* as well as stand-alone manuscripts going to other journals – are being met with great interest among urologists and health services researchers across the country.

Offering the Latest Treatment for Prostate Cancer

The UCLA Department of Urology is proud to offer The da Vinci Prostatectomy, otherwise known as robotic-assisted laparoscopic radical prostatectomy. This FDA-approved system allows for a less invasive approach to prostate removal, incorporating the latest advances in robotic-assisted technology and allowing for greater precision, control and flexibility for the surgeon. Two UCLA urologists, Drs Peter Schulam and Robert Reiter, have been performing laparoscopic prostatectomies since 2001. The addition of the da Vinci robot provides a new dimension to the broad array of technologies available in the department to treat early-stage prostate cancer. For more information on the robotic-assisted laparoscopic radical prostatectomy procedure, please call our patient referral line at (310) 794-7700.



Urology Briefs:

he 20th annual UCLA State-of-the-Art Urology Conference was held March 10-13 at the Ritz Carlton Hotel in Marina del Rey. This ongoing conference, offered by the Department of Urology in conjunction with UCLA's Continuing Medical Education office, is specifically designed for practicing urologists and the challenges they face in practice management.

This year's conference drew a record attendance of physicians participating in the three-day meeting, which featured lectures by departmental speakers along with several prestigious visiting professors, including keynote speaker William J. Catalona, MD, professor of urology at Northwestern Feinberg School of Medicine. Other visiting lecturers included Culley C. Carson, III, MD (University of North Carolina), Harry W. Herr, MD (Cornell University Medical Center), Stephen Y. Nakada, MD (University of Wisconsin-Madison), Christopher K. Payne, MD (Stanford University Medical Center), Eric J. Small, MD (UCSF Comprehensive Cancer Center), and Anthony L. Zietman, MD (Harvard Medical School).

The Department of Urology recently embarked on the organization of its inaugural annual research conference. From Infertility to Cancer: Future Frontiers in Urological Research was held February 25 on the UCLA campus with three visiting professors and one UCLA faculty member: Anthony Atala, MD (Wake Forest University School of Medicine), Colin E. Bishop, PhD (Baylor College of Medicine), Sean J. Morrison, PhD (University of Michigan), and Chih-Ming Ho, PhD (UCLA). It is hoped that this annual meeting will continue to raise the awareness on campus of all urologic research and stimulate new collaborations between clinical faculty and researchers.

Giving Opportunities

The Department of Urology
welcomes your contributions
throughout the year. To send a
contribution in support of our research
programs or as a tribute or memorial,
please make your check payable to
"Regents of UC" and
mail it to Ms Rain Burch
at the Department of
Urology, Box 951738,
Los Angeles, CA 90095-1738.
For donations by credit card
please call Ms Burch at

310-794-2159.

Legislation

Would Bolster IMPACT Funding

bill has been introduced in the California Legislature to make a popular UCLA Department of Urology-based statewide prostate cancer treatment program a permanent entity within the Department of Health Services.

IMPACT (Improving Access, Counseling and Treatment for Californians with Prostate Cancer) provides free, quality treatment to low-income and uninsured Californians who have been diagnosed with prostate cancer and have no alternatives for their care. The program, under the leadership of Mark S. Litwin, MD, MPH, professor of urology and public health, and James Orecklin, MD, associate clinical professor of urology, has successfully treated more than 600 men since it began in 2001. But funding reductions in the most recent state budget put new enrollment on hold.

In February, Sen. Deborah
Ortiz (D-Sacramento) introduced SB
650, which, in addition to making
IMPACT a permanent program within
the Department of Health Services,
would put it on a five-year, rather than
annual, funding cycle. Passage of the
legislation would help ensure continuity
of funding and avoid future disruptions
in program enrollment. Among the
bill's most active supporters is the
California Prostate Cancer Coalition,
which consists of 120 prostate cancer
support groups throughout the state.

"Since 2001, this program has saved the lives of more than 600 victims of prostate cancer who had no health insurance and no other place to go for critical cancer treatment," says Sen. Ortiz. "By providing men with prompt care, the survival rates increase and the state avoids having to pay for more expensive health care costs as the disease progresses."

cancer patients as a
UCLA Department of Urology
resident, Ganesh S. Palapattu, MD,
began to think seriously about contributing
to a future in which such cases would be rare.
"As opposed to just treating the disease, the biggest
impact would be to identify pathways involved in the
formation of cancer and devise ways to prevent it from even
happening," he says. "The idea would be to get to the point
where preventive strategies would be efficacious and more 'radical'
treatments reserved for only a select few."

Since leaving UCLA in June 2003, Dr Palapattu has been pursuing that goal as an American Foundation of Urologic Disease fellow in the Johns Hopkins laboratory of William G. Nelson, MD, PhD, where he studies the role of inflammation in prostate carcinogenesis and looks at how dietary factors interact with the inflammatory process as the tumor forms. "For some time, it has been clear that inflammation – the body's immune response to injury – is important in the development of cancers of the liver, bladder, and stomach," Dr Palapattu explains. "More recently, mounting evidence suggests it is also a factor in other cancers, including prostate." Working with Drs Nelson and Angelo DeMarzo, Dr Palapattu has developed an animal model to facilitate studies

opening a window into the processes involved in prostate carcinogenesis. His fellowship nearing an end, Dr Palapattu has accepted a position as an assistant professor of urology at the University of Rochester in New York; beginning this fall, he will have his own laboratory where he will build on the research he began at Hopkins, in addition to practicing urologic oncology.

The surgeon-scientist role is one that Dr
Palapattu began to envision during the UCLA
residency year in which he worked in the laboratory
of Dr Robert Reiter, professor of urology. "I found
him to be the quintessential model for a surgeonscientist – one of many great mentors I had at
UCLA," Dr Palapattu says. Other faculty in the
department, including Drs Mark S. Litwin, Arie
Belldegrun, Shlomo Raz, Jacob Rajfer, R. B.
Smith and department chairman Jean deKernion,
solidified Dr Palapattu's resolve to combine clinical
practice with research. "It's nice to help patients
while being involved at the same time in pushing



Ganesh S. Palapattu, MD, will be an assistant professor of urology at the University of Rochester in New York beginning this fall.

forward the frontiers of science – finding new solutions to old problems," Dr Palapattu observes. "It enables me, potentially, to have an impact on many more people than I could if I were only seeing patients."

Although his UCLA residency ended two years ago, Dr Palapattu continues to benefit from the contacts he made. He first learned of the Rochester position from Dr Patrick C. Walsh, former chairman of urology at Hopkins and a former UCLA urology resident. The current chair of urology at Rochester, Dr Edward Messing, is a former UCLA fellow; Dr Messing took over the chairmanship from Dr Abraham Cockett – another UCLA alum.

"I really enjoyed my time at UCLA," Dr Palapattu says. "I had tremendous mentors. I have been fortunate to have gone on to hone my research skills with top people at Hopkins, and now

at Hopkins, and now it's up to me."

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Human Genetics and Pediatrics,
Director, Laboratory of Female Urology
and Sexual Medicine
Specialty: Sexual and Gender-based Medicine Research

LILY Wu, MD, PHD Associate Professor of Urology Specialty: Molecular Biology, Gene Research

GANG ZENG, PHD
Assistant Professor of Urology
Specialty: Tumor Immunology, Cancer Vaccine



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