

# Your Urology

Department of Urology

www.urology.uci.edu

Fall 2010



**Xiaolin Zi, Ph.D.**

**Associate Professor  
Director of Urologic Research  
Department of Urology**

**Training**

Graduate  
McGill University, Montreal, Canada

**Doctorate**

Shanghai Medical University, P.R. China

**Postdoctoral Training**

Case Western Reserve University, Cleveland, Ohio, and McGill University, Montreal, Canada

Dr. Zi combines his 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 that have identified silibinin as a strong antiproliferative and differentiate agent for prostate cancer cells have resulted in a Phase 2 clinical trial of silibinin in prostate cancer patients.

Dr. Zi is 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 (patent). 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.

## Prevention of bladder cancer by inhibiting aging: Taking converging routes to disease prevention

Dr. Xiaolin Zi and his associates are examining whether *Rhodiola rosea* extracts, with demonstrated anti-aging properties, are useful for bladder cancer prevention in the elderly. Bladder cancer can occur at any age, but it is most common in older people (average age at diagnosis is 72 years for men and 74 years for women). Exposure to carcinogens both from tobacco and from working in some industries are known risk factors for bladder cancer. However, many bladder cancer cases also occur with no apparent exposure to these carcinogens. Thus, bladder cancer clearly appears to be a disease that develops during the aging process, especially among people in their 80s and 90s.

### Inhibition of the nutrient-sensing mTOR pathway is an attractive strategy for both anti-aging and bladder cancer prevention in the elderly.

The aging process is thought to be associated with changes in certain molecular pathways and regulatory mechanisms, such as the nutrient-sensing Mammalian Target of Rapamycin (mTOR) pathway, oxidative stress, DNA damage and genome destabilization,

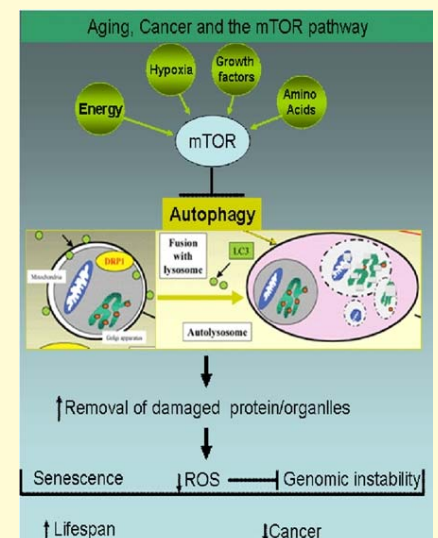
depletion of the stem cell pool and accumulation of senescent cells, and psychological stress. The mTOR pathway is an important regulator of energy and nutrient levels in the cell, and it regulates cell growth according to the level of nutrients available in the environment. The mTOR pathway plays a central but conservative role in the aging process.

Scientists have already demonstrated that the inhibition of the mTOR pathway consistently and robustly delays aging and extends the life span in diverse species (e.g., the fruit fly, mouse and monkey). In addition, inhibition of aging via targeting the mTOR pathway can delay the onset of age-related diseases, including diabetes, cancer, cardiovascular disease and brain atrophy. Bladder cancer cells reveal inappropriate

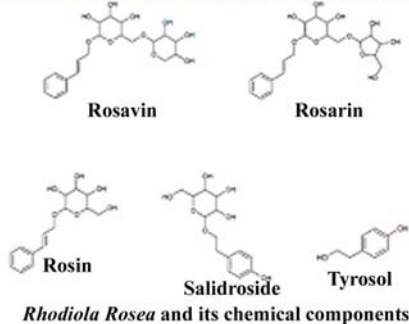
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Dr. Zi's lab team -- (left to right) Sakai Toshinori, Zheng Sun, Xusen Li, Danielle Jandial, Matthew Duenas, Xiaolin Zi, Zhongbo Liu, Xia Xu, Linda Lan-Khanh Nguyen, Shuman Liu, and Christina Lee. Not pictured - Shariar Irani, Bishoy Zakhary, and Chris Blair.



## Rhodiola and starved cancer cells (Rhodiola induces autophagy)



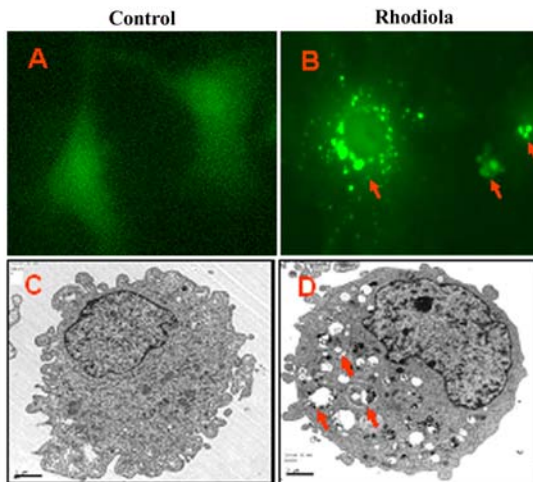
activation of the mTOR pathway promoting unregulated growth and proliferation, as well as resistance to anticancer agents. Therefore, inhibition of the nutrient-sensing mTOR pathway is an attractive strategy for both anti-aging and bladder cancer prevention in the elderly.

*Rhodiola rosea* L., also known as "golden root," is widely distributed at high altitudes (up to 2,280 meters) in the arctic and mountainous regions throughout

### It appears that *Rhodiola rosea* extracts can starve bladder cancer cells to death.

Europe and Asia. *Rhodiola* has been in use for centuries to increase work productivity, longevity, resistance to high-altitude sickness and extremely cold environment, and to treat fatigue and depression. Since the 1940s, Soviet athletes and cosmonauts have used the herb to boost the body's response to stress and to enhance physical endurance. In recent studies, flies and worms that ate a diet rich with *Rhodiola rosea* lived an average of 10 to 30 percent longer than the groups that didn't eat the herb.

Dr. Zi's group has performed extensive laboratory analyses of *Rhodiola rosea* extracts and its influence on bladder cancer cells. They found that *Rhodiola rosea* extracts can effectively inhibit the growth of cancer cells derived from different stages of bladder cancer without any toxicity to normal bladder cells. Further studies indicate that the influence of *Rhodiola rosea* extracts are dependent on a gene called p53, a major tumor-suppressor gene that is mutated in a majority of bladder cancer cells. Cells with defective p53 were actually more sensitive to growth inhibition by *Rhodiola rosea* extracts.



(A) Fluorescently labeled bladder cancer cells  
(B) Fluorescently labeled autophagosomes in bladder cancer cells  
(C) Electron micrograph of bladder cancer cells;  
(D) Electron micrograph of autophagic structures in bladder cancer cells.

The herb appears to inhibit the mTOR pathway, slowing down the aging process and inducing autophagy in bladder cancer cells (pictured above). Autophagy is a process involving the degradation of a cell's components through the lysosomal machinery. It appears that *Rhodiola rosea* extracts can starve bladder cancer cells to death. Dr. Zi and his associates have summarized these results in a manuscript and submitted it to a journal for publication.

In addition, Dr. Zi is applying for research funding from the National Cancer Institute to further explore the properties of *Rhodiola rosea* extracts. A few models faithfully mimic different types of human bladder cancer development -- both papillary and flat lesions. Dr. Zi's group is also identifying novel active components in *Rhodiola rosea* extracts that are responsible for anticancer bladder cell activity. If *Rhodiola rosea* extracts or its active components show promising results in these studies, then a well-designed future clinical trial will follow studying bladder cancer patients or elderly patients with a high risk of bladder cancer.

Because of the effects of aging on bladder cancer development, people aged 50 and over should be especially conscious of ways to prevent and detect bladder cancer. The risk of bladder cancer can be greatly reduced by the daily decisions we make, including avoiding the use of tobacco products, avoiding exposure to industrial carcinogens, and eating a healthful diet. These are the most important considerations, and your risk of developing bladder cancer can be greatly reduced.

**Smoking, gender and diet can affect the risk of developing bladder cancer. Anything that increases your chance of getting a disease is called a risk factor.**

Risk factors for bladder cancer include the following:

- ❖ Smoking.
- ❖ Being exposed to certain substances at work, such as rubber, certain dyes and textiles, paint, and hair-dressing supplies.
- ❖ A diet high in fried meats and fat.
- ❖ Being older, male, or white.
- ❖ Having an infection caused by a certain parasite, *Schistosoma haematobium*.

**Possible signs of bladder cancer include blood in the urine or pain during urination.**

These and other symptoms may be caused by bladder cancer. Other conditions may cause the same symptoms. A doctor should be consulted if any of the following problems occur:

- ❖ Blood in the urine (slightly rusty to bright red in color).
- ❖ Frequent urination, or feeling the need to urinate without being able to do so.
- ❖ Pain during urination.
- ❖ Lower back pain.

**Tests that examine the urine, vagina, or rectum are used to help detect and diagnose bladder cancer.**

The following tests and procedures may be used --

**CT scan (CAT scan):** A procedure that makes a series of detailed pictures of areas inside the body, taken from different angles. The pictures are made by a computer linked to an X-ray machine. A dye may be injected into a vein or swallowed to help the organs or tissues show up more clearly. This procedure is also called computed tomography, computerized tomography, or computerized axial tomography.

**Urinalysis:** A test to check the color of urine and its contents, such as sugar, protein, red blood cells, and white blood cells.

**Internal exam:** An exam of the vagina and/or rectum. The doctor inserts gloved fingers into the vagina and/or rectum to feel for lumps.

**Intravenous pyelogram (IVP):** A series of X-rays of the kidneys, ureters, and bladder to find out if cancer is present in these organs. A contrast dye is injected into a vein.

**Cystoscopy:** A procedure to look inside the bladder and urethra to check for abnormal areas. A thin, tube-like cystoscope is inserted through the urethra into the bladder to view tissue and collect tissue samples.

National Cancer Institute  
<http://www.cancer.gov/cancer/topics/pdq/treatment/bladder/patient>

**Atreya Dash, M.D.**  
**For appointments and referrals, please call -- 714.456.7005**



## Life changing surgery for patients suffering from urethral stricture and Peyronie's disease

Gordon Ward was a patient diagnosed at the age of 17 with urethral stricture disease, a narrowing of his urethra. He was treated with a painful urethral dilation procedure, in which metal instruments of increasing size were inserted through the urethra to stretch the stricture open. The stricture then reoccurred, and dilation was performed repeatedly with each procedure failing to cure the stricture disease. The patient then underwent a procedure, under anesthesia, during which an instrument was inserted into the urethra to cut the stricture internally, a surgery called a direct vision internal urethrotomy (DVIU). This procedure also failed, and over the subsequent 43 years, Ward underwent countless dilations and 31 DVIUs under anesthesia, all unsuccessful. During the 32nd DVIU procedure, the urethra was totally closed off to the point where the internal knife could not be passed through the stricture to cut it open. A tube called a suprapubic tube was then placed directly into the bladder so that the bladder could empty. At that point, Ward was referred by his local urologist to **Dr. Joel Gelman** for possible reconstructive surgery to repair his urethra, so that tubes and dilations and incisions would no longer be required.

On the X-ray (below), there is a gap between the urethra near the bladder and the urethra within the penis. Eleven years ago, Dr. Gelman developed a modified technique to reconstruct segments of the urethra (where tissue is absent) using two grafts taken from inside the cheek in the mouth. In October 2010, Dr. Gelman and Dr. Jordan Siegel will present a paper of the research results, involving 14 patients, at the Western Section of the American Urological Association. To date, all of these patients have had excellent outcomes with no patient requiring subsequent treatment.

Ward's urethrolplasty procedure was a total success. He is now able to urinate normally for the first time in over 43 years. *"It was just amazing, and I had forgotten the pleasure of just jumping in the water to go swimming, because I couldn't do it for so many years (due to the formerly installed catheter). I am so grateful to Dr. Gelman and thrilled about this reconstructive surgical procedure that improved my quality of life."* -- Mr. Ward

**Joel Gelman, M.D.**  
**For appointments and referrals,**  
**please call -- 714.456.2951**



**Joel Gelman, M.D.**

**Associate Clinical Professor of Urology  
Volunteer Faculty**

### **Training**

Undergraduate  
Indiana University

Medical School  
Medical College of Ohio

Residency  
Indiana University and University of  
California, Los Angeles

Fellowship Training  
Reconstructive Surgery/ Devine Center,  
Norfolk, VA

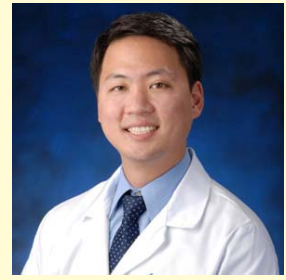
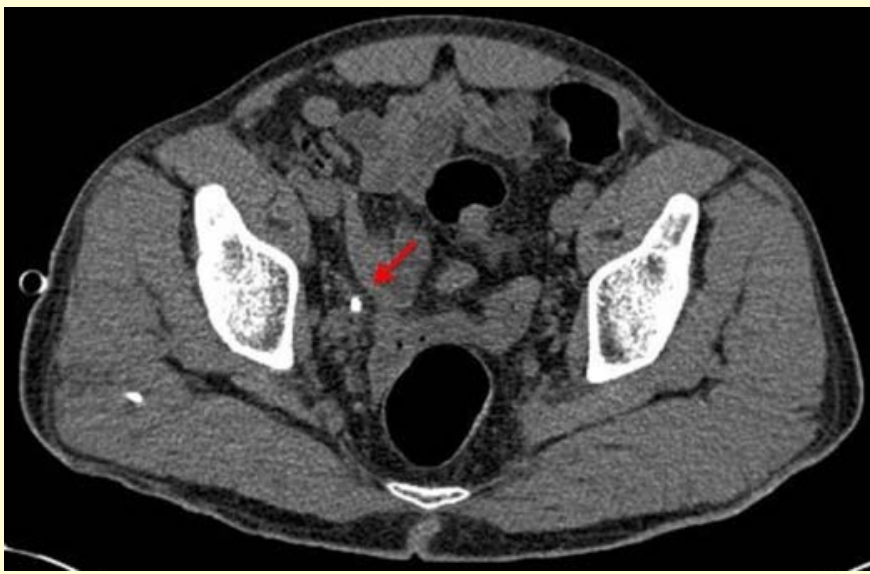
At UC Irvine, Dr. Gelman is a fellowship-trained expert in male urethral and penile urethral reconstruction and the only urologist in Southern California who is exclusively specialized in male reconstructive urethral and penile surgery. In 1998, Dr. Gelman was recruited to join the UC Irvine urology faculty and has established an international referral center for reconstructive urology. Most of Dr. Gelman's patients are referred by other urologists. More than 200 urologists have referred patients to Dr. Gelman for complex reconstruction for strictures of the urethra (called urethroplasty) and Peyronie's disease (a disorder of disabling curvature of the penis of up to 90 degrees).

In addition, Dr. Gelman specializes in complex revision penile implant surgery and is widely known for his outstanding success, even with complex revision surgery. Patients have travelled from 20 different states across the country and also from other countries specifically to have their surgery performed by Dr. Gelman. To date, he has performed over 700 male urethral and penile reconstructive surgeries.



Dr. Gelman observed on Mr. Ward's X-ray (retrograde urethrogram, RUG) that there was a total obliteration of his urethra.

**Dr. Joel Gelman was recently elected to the board of directors of the Society of Genitourinary Reconstructive Surgeons at the American Urological Association 2010 annual meeting for a three-year appointment. Dr. Gelman's election by his peers to this position is a reflection of his expertise as a recognized leader in urethral and penile reconstructive surgery.**



**William Sohn, M.D.**  
Senior Resident  
Department of Urology

Distal ureteral stone easily identified using 25% of the regular dose

## Department of Urology now offering low-dose CT scans for kidney stones

Non-contrast computed tomography (CT) remains essential in the workup of urolithiasis. The information it provides -- including number of stones, location, size of stone, density (hardness), skin-to-stone distance, and associated hydronephrosis (dilation of the upper urinary tract) -- makes the CT scan a wonderful diagnostic tool. However, we must balance the advantages of the information we gain with the disadvantages, namely radiation exposure. In a recent article in the *Journal of Urology*, Jellison<sup>1</sup> et al. compiled a table displaying the amounts of radiation exposure from different sources.

Diagnostic Procedure	Typical Effective Dose (mSv)	# chest X-rays for equivalent dose
Chest X-ray	0.02	1
NYC-LON roundtrip flight	0.1	5
KUB	0.7-0.9	35-45
CT abdomen/pelvis	20	1,000
Atomic bomb survivors 3 km from detonation	50-100	2,500-5,000

Radiation exposure carries the risk of causing secondary malignancies. The yearly recommended maximum radiation exposure is 50 mSv as determined by the FDA. Unfortunately, chronic urinary stone patients may undergo two or more CT scans in a year during emergency room visits, with primary care physicians, or after trials of a stone passage.

On review of recent literature, the feasibility of using a lower dose of radiation to accurately diagnose urolithiasis has been explored. In this recent paper in the *Journal of Radiology*, Ciaschini<sup>2</sup> et al. determined that for stones greater than 3 mm, there was no significant difference in the sensitivity of stone diagnosis at 100%, 50%, or 25% of the effective dose. The study by Jellison confirmed the excellent sensitivity and specificity at low dose settings.

**UC Irvine is the first hospital in Orange County to create a dedicated low radiation dose CT stone search protocol.**

The Department of Urology at UC Irvine Medical Center prides itself on staying at the forefront of technology in the pursuit of optimizing patient care. Based on the recent data, we began a collaborative, multi-department initiative to utilize low-dose CT scans in our clinical practice. Working closely with the Department of Radiology as well as the Department of Emergency Medicine, we instituted this new protocol at the beginning of 2010. This protocol cuts the radiation dose of the standard non-contrast CT scan by 50-75%. UC Irvine Medical Center is the first hospital in Orange County to create a dedicated, low radiation dose CT stone search protocol. Many of our patients have already been diagnosed using the low-dose CT scan, and we have relied on these scans to determine our treatment plan.

If you are interested in the new low-dose CT protocol, and would like to refer your patients to include this scan in their diagnostic workup, please call 714.456.7005 for more information. If you are a patient undergoing a workup for stones, ask your doctor if the low-dose CT scan is right for you.

1) Jellison et al. Effect of low dose radiation computerized tomography protocols on distal ureteral calculus detection. *J Urol* 182 (6):2762-2767

2) Ciaschini et al. Urinary calculi: radiation dose reduction of 50% and 75% at CT--effect on sensitivity. *Radiology* 251 (1):105 -111

Dr. Tony Khoury was televised on PBS the morning of April 13, 2010 and spoke on the subject of bedwetting.



**Tony E. Khoury, M.D.**

**Interim Chairman and  
Professor of Urology  
Chief of Pediatric Urology at UC Irvine  
Department of Urology and  
Children's Hospital of Orange County**

## Urinary Incontinence (Enuresis)

### What is urinary incontinence (enuresis)?

Urinary incontinence (enuresis) is a medical name for bedwetting, or the accidental urination by children who should be developmentally able to have control of their bladders. Girls usually have bladder control before boys do. The diagnosis of enuresis is for girls over the age of 5 and for boys over the age of 6 who are still having urinary control problems. There are different types of bedwetting that may occur, including the following:

- ❖ Diurnal enuresis - wetting during the day.
- ❖ Nocturnal enuresis - wetting during the night.
- ❖ Primary enuresis - occurs when the child has never fully mastered toilet-training.
- ❖ Secondary enuresis - occurs when the child did have a period of dryness, but then returned to having periods of incontinence.

### Facts about urinary incontinence

- ❖ Nocturnal enuresis affects 5 million to 7 million children in the U.S.
- ❖ Nocturnal enuresis occurs three-times more frequently in boys than in girls.
- ❖ Primary enuresis is the most common form of urinary incontinence among children.

### What causes urinary incontinence?

There are many factors that may be involved, and many theories are given for why children wet. The following is a list of some of the possible reasons for the problem:

- ❖ Poor toilet-training.
- ❖ Delay of the ability to hold urine (this may be a factor up to about the age of 5).

- ❖ Small bladders.
- ❖ Poor sleep habits or the presence of a sleep disorder.
- ❖ A problem with the proper functioning of hormones that help to regulate urination.

### How is urinary incontinence diagnosed?

Urinary incontinence is usually diagnosed based on a complete medical history and physical examination of your child. In addition to talking with you and the child, your child's physician may perform the following to help rule out other causes for the wetting:

- ❖ Urine tests (to make sure there is not an underlying infection, or condition such as diabetes).
- ❖ Blood pressure measurement.
- ❖ Blood tests.

### Treatment for urinary incontinence

Specific treatment for enuresis will be determined by your child's physician based on:

- ❖ Your child's age, overall health, and medical history.
- ❖ Extent of the condition.
- ❖ Your child's tolerance for specific medications, procedures, or therapies.
- ❖ Expectations for the course of the condition.
- ❖ Your opinion or preference.

### Prior to starting treatment, it is important to know that:

- ❖ Enuresis at night without daytime symptoms occurs in up to 20 percent of children at the age of five.
- ❖ The child is not at fault and should not be punished. The child cannot control the wetting.
- ❖ Enuresis usually goes away on its own in about 15 percent of affected children each year.

### Treatment may include:

- ❖ Positive reinforcement of the child (i.e., the use of sticker charts for dry nights).
- ❖ Use of night-time alarms to help notify the child when wetting is occurring.
- ❖ Medications, as prescribed by your child's physician (to help control the wetting).
- ❖ Bladder training to help increase the bladder size and the child's ability to know when he or she has to urinate (this is done by having the child wait as long as possible during the day to urinate and let the bladder get full).

In addition, counseling of the child and family may help to determine any stress the child may be under. Strategies for reducing your child's stress will be discussed.

**For appointments and referrals to see Dr. Tony Khoury, please call:**

**CHOC Children's Urology Center:  
714.512.3919**

**For Academic Issues:  
714.512.3914**

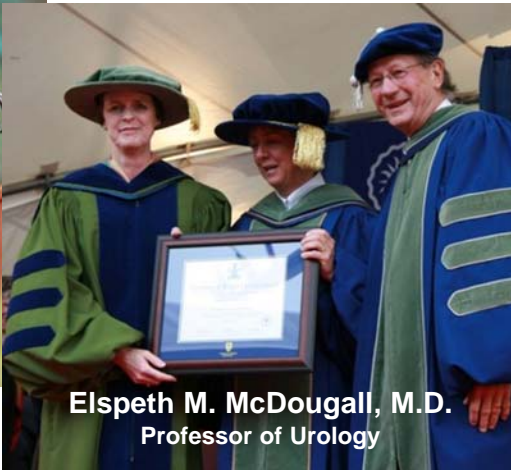
[www.choc.org](http://www.choc.org)







## Dr. McDougall extols lifelong learning to grads, Kamloops, B.C., Canada



**Elspeth M. McDougall, M.D.**  
Professor of Urology

Reprinted from Daily News, Kamloops, B.C.

Lifelong learning is an idea regularly tossed out during university and high school graduation ceremonies. But a woman given an honorary doctorate by Thompson Rivers University, Friday, June 4, 2010, stood at the podium as a real-life embodiment of the idea.

**Dr. Elspeth McDougall**, a faculty member in University of California Irvine's medical school, declared it an "extraordinary honour" to be granted the degree from the institution where she attended the first year of what would become a lifetime of learning across North America.

"I'm proud of my beginnings at Cariboo College and always regretted not having a degree at this institution to accompany the five other degrees in 35 years," McDougall told several hundred graduates at the convocation for science and the school of nursing. "As I said, I'm a slow learner."

McDougall is a physician, surgeon and educator recognized worldwide for her research and innovations in the field of urology. She grew up here and graduated from Kamloops secondary school. Following a one-year university transfer program at TRU-predecessor Cariboo College, she graduated from University of Alberta and University of Calgary. In addition to her medical training, Dr. McDougall has a master's degree in health profession education. Her parents, who live in Kamloops, attended the convocation along with hundreds of other proud parents whose children received diplomas and degrees in everything from natural science to nursing. "They always believed in me, even when others didn't - including myself at times," McDougall said of her parents. She also mentioned by name high school and college teachers here who influenced her career and demonstrated "the limitless possibility of learning." "They demonstrated and nurtured how incredibly exciting and fun it could be to learn how things work."

Giving inspiration to the graduating students, for which she received a standing ovation, Dr. McDougall told them to "do what's right and speak what's true." "Do this not because it's courageous and noble, but because it will help quiet conflicts in your deepest soul."

-- Cam Fortems, Daily News Staff Reporter (Kamloops, British Columbia, Canada)

**Dr. Elspeth McDougall was awarded the 2010 Excellence In Teaching Award from the Department of Urology. She will also be away on sabbatical from August 2010 to April 2011 to initiate educational and surgical training programs in China, through collaborative efforts by the University of Western Ontario, the Royal College of Surgeons of Canada, and the American Urological Association, Office of Education.**



**Tony E. Khoury, M.D.**  
Interim Chairman and  
Professor of Urology  
Chief of Pediatric Urology at UC Irvine  
Department of Urology and  
Children's Hospital of Orange County

## Dr. Khoury appointed first Schmid Chair

**Dr. Tony Khoury**, pediatric urology chief, Department of Urology interim chair and professor, has been appointed the first Walter R. Schmid Chair in Pediatric Urology, effective July 1, 2010. The chair was established December 4, 2009, to support an outstanding scholar who would significantly enhance the School of Medicine's academic reputation and be a nationally recognized leader in pediatric oncology. The appointment may be held for five-year renewable terms, upon recommendation of the dean. Dr. Khoury's expertise includes medical and surgical management of complex pediatric urology anomalies.

## Newly elected member of the American Association of Genitourinary Surgeons

**Dr. Tony Khoury** was elected by his peers as a new member of the American Association of Genitourinary Surgeons (AAGUS) during its annual meeting, May 5-8, 2010. AAGUS is an association of leading academic urologists from the United States, Canada and around the world, dedicated to the study of diseases of the genitourinary system.



**Elspeth M. McDougall, M.D.**  
Professor of Urology

## UC Irvine's innovative Robotic Oncology Center of Excellence offers minimally invasive treatment in multiple disciplines

<http://www.roboticoncology.uci.edu/>

In the ever-evolving battle against cancer, the surgical robot is gaining ground. UC Irvine Healthcare announced last month that it's the first medical center on the West Coast and the only one in California to perform robotic thyroidectomies, which remove the diseased gland without leaving a visible scar on the neck. The da Vinci® Surgical System is facilitating an increasing number of such procedures, and to further advance use of this new technology, UC Irvine Healthcare in July established a Robotic Oncology Center. **Dr. Jason H. Kim**, associate clinical professor of otolaryngology and a head & neck cancer specialist, has employed the da Vinci system on three patients with thyroid tumors. "We're excited to be able to offer this kind of surgery to the Orange County community," Kim says. "Traditional 'open' surgery to remove the thyroid gland requires a 3- to 5-inch incision across the front of the neck, and other minimally invasive surgical techniques can reduce the scar to about 1 inch. But with the robot, we avoid the neck incision altogether by making a small, easily hidden cut in the patient's armpit. That opening provides access for the robot's arms, which then are maneuvered by the surgeon to the thyroid."

At UC Irvine Medical Center, prostate, kidney, ureteral and gynecologic cancers also are being addressed via robotic surgery. Use of the da Vinci technology will expand in that last category under the new director of gynecologic oncology, **Dr. Robert E. Bristow**, who gained extensive experience with robotics at Johns Hopkins University. And robot-assisted surgery for lung, stomach and colorectal cancers is soon to follow. "To our knowledge, there isn't another center in the country specific to robotic oncology," says urologic oncologist **Dr. Thomas E. Ahlering**, director of the Robotic Oncology Center and a nationally known expert in robotic prostatectomy. He's performed more than 1,000 robotic surgeries to treat prostate cancer and has developed techniques to reduce postoperative urinary difficulties. "This center is vitally important to our community," Ahlering says. "Typically, cancer involves radical procedures. The Robotic Oncology Center emphasizes minimally invasive approaches that achieve equal or better medical outcomes."

For surgeons, robotics can offer enhanced precision, dexterity, range of motion and imaging during operations. For patients, the technology can mean less injury to nearby healthy tissue, smaller scars, reduced pain, decreased need for medication and faster recovery. "The Robotic Oncology Center is a prime example of how an academic medical center can pool the talents of its world-renowned surgeons to provide the highest quality of robot-assisted cancer care to Orange County and beyond," says **Dr. Ralph V. Clayman**, dean of UCI's School of Medicine and an internationally recognized authority in minimally invasive renal surgery. "Our new center, which focuses on the specific application of robotic technology for cancer surgery, enables us to continually advance this exciting technology and create university-led innovations, much to the betterment of every patient who seeks our care."

The Robotic Oncology Center is part of UCI's Chao Family Comprehensive Cancer Center, one of just 40 National Cancer Institute-designated comprehensive cancer centers in the U.S. and the only one in Orange County. In 2002, doctors there were the first in Southern California to perform robotic prostate surgery, using the da Vinci system. UCI also houses one of the busiest robotic training facilities for surgeons on the West Coast. "To have this in our own backyard," says urologist **Dr. Michael K. Louie**, co-director of the Robotic Oncology Center, "is a wonderful gift to the Orange County community."

- Marcida Dodson, UC Irvine Healthcare Communications



Drs. Thomas E. Ahlering (left) and Michael K. Louie, who head UC Irvine Medical Center's new Robotic Oncology Center, battle cancer with such state-of-the-art technology as the da Vinci® Surgical System.



**Thomas E. Ahlering, M.D.**  
Professor and Vice Chairman  
Department of Urology

### Congratulations to Dr. Ahlering - celebrating 1,000<sup>th</sup> robotic prostatectomy case October 5, 2010

Since UC Irvine Medical Center obtained Orange County's first robotic surgical system in 2002, robotic technology has been used for urologic, gynecologic, gastrointestinal, thoracic and cardiac, and pediatric procedures. Dr. Thomas Ahlering introduced robotic prostatectomy to Southern California in 2002 and has since performed more than 1,000 robot-assisted prostatectomies.

### da Vinci robot-assisted surgical procedures

#### Cardiac Surgery

- Cardiac revascularization
- Mitral valve repair

#### General Surgery

- Gastric bypass
- Nissen fundoplication
- Low anterior resection
- da Vinci Heller myotomy

#### Gynecologic Surgery

- Hysterectomy
- Myomectomy
- Sacrocolpopexy

#### Thoracic Procedures

- Thymectomy
- Lobectomy
- Esophagectomy
- Mediastinal tumor resection

#### Urology

- Prostatectomy
- Pyeloplasty
- Cystectomy
- Nephrectomy
- Partial nephrectomy
- Ureteral reimplantation

#### Pediatric Procedures

- Pyeloplasty
- Ureteral reimplantation
- Cholecystectomy
- Nissen fundoplication
- Aortic ring ligation
- Patent ductus arteriosus ligation (PDA)
- Atrial septal defect closure

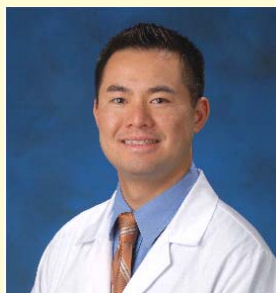




**Regina Hovey, M.D.**

**Associate Clinical Professor of Urology**

In June 2010, Dr. Regina Hovey acquired a private urology practice in Fountain Valley, CA, and will not be seeing patients at UC Irvine Medical Center. We wish her much success and good luck in her private practice. She has been a vital member of the UC Irvine Department of Urology for 12 years. We will all miss her.



**Michael K. Louie, M.D.**

**Assistant Clinical Professor  
Director of the UC Irvine Urology  
Residency Program**

Beginning July 2010, Dr. Michael Louie assumed the directorship of the urology residency training program.



**Donald L. Pick, M.D.**

**Department of Urology  
Endourology Fellow  
2008 - 2010**

### **Congratulations to Dr. Pick**

Dr. Donald Pick is the recipient of the First Place Prize in the Endourological Society Basic Science Research Essay Contest, awarded at the World Congress of Endourology meeting in Chicago early September 2010. This is well-deserved recognition of Dr. Pick's hard work and effort in the research on an apparatus for studying ureteral physiology and the effect of different medications, along with chitosan, on ureteral peristalsis.

**Ralph V. Clayman, M.D.  
Dean, School of Medicine**



### **Dr. Clayman honored with proposed future endowed chair in minimally invasive urologic surgery**

On June 26, 2010, the Department of Urology, along with Cook Medical and Karl Storz Endoscopy, hosted a dinner honoring **Dr. Ralph V. Clayman** for the 20th anniversary of the first laparoscopic nephrectomy and a special tribute for his lifetime achievements in urology.

The proceeds from the anniversary dinner will form the nucleus for a proposed future endowed chair honoring the legacy of Dr. Clayman for his lifetime achievements and current work in minimally invasive urologic surgery.

At UC Irvine in the medical field, endowed chairs enable our research faculty and clinical physicians to be fully engaged in cutting-edge science and clinical discoveries that are changing the quality of healthcare here in Orange County and throughout the world. The goal is to propose to name the endowed chair in honor of Dr. Clayman after his retirement.

An endowed chair is a vital tool to ensure faculty excellence by providing invaluable support above and beyond salary for use in research, teaching or service activities. It is also a powerful recruitment tool; the more chairs a school has endowed, the more prestigious and attractive the school is to potential faculty.

We would like to give special recognition to our sponsors for the evening:  
Platinum Sponsors - Cook Medical and Karl Storz Endoscopy  
Silver Tables - Melinda & Doug McCrea and Susan & Wally Muratori, CHOC Pediatric Subspecialty Faculty Physicians, Ms. Anne Heineman, Steve & Yvonne Hayes, Dr. Elspeth McDougall, UC Irvine Department of Anesthesiology







**Jason Lee, M.D., FRCSC**  
 Assistant Clinical Professor  
 Interim Director of Urologic  
 Surgery Education

**Congratulations to Dr. Jason Lee and  
 Dr. Elspeth McDougall**

Drs. Jason Lee and Elspeth McDougall's presentation was awarded First Prize as the best paper, "Impact of Pre-operative Warm-up Exercises on Surgical Performance in Urology," of the entire World Congress of Endourology, held the first week of September 2010. This is very high praise as more than 1,200 people from over 40 countries attended and presented over 900 papers.

Dr. Jason Lee will assume the clinical and surgical responsibilities of Dr. Elspeth McDougall while she is away on sabbatical, August 2010 to April 2011.

**Training**

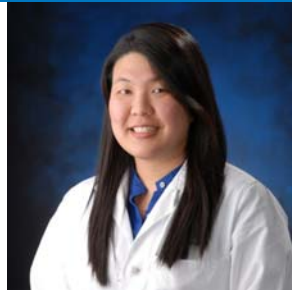
Medical School  
 University of Toronto

Urology Residency  
 University of Toronto

Fellowship Training  
 University of California, Irvine

Dr. Jason Lee is an assistant clinical professor at University of California, Irvine Department of Urology working as the minimally invasive urologic surgery education fellow. He completed his medical school and urology residency training in Toronto, Ontario, Canada at the University of Toronto. During his training in Toronto, he gained significant operative experience in laparoscopy, endourology, uro-oncology, in addition to valuable experiences in clinical research. His current educational responsibilities include instruction and assessment of MIS skills through the UC Irvine C<sup>3</sup>REST<sup>®</sup> Surgical Education Center. In addition, he is currently working on his master's degree in health profession education through the University of Illinois at Chicago.

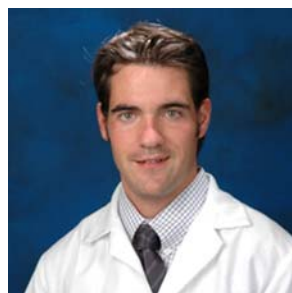
**Jason Lee, M.D.**  
**For appointments and referrals,**  
**please call: 714.456.7005**



**Jane Cho, M.D.**  
 Junior Resident (R1)  
 UC Irvine Department of Urology

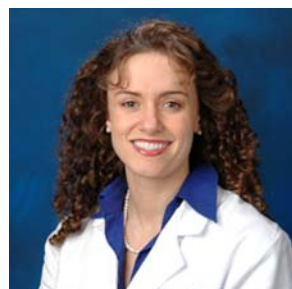
**Congratulations to Dr. Jane Cho**

Dr. Jane Cho is the recipient of the 2010 Surgical Intern Award for Excellence from the Surgical ICU of Long Beach VA Healthcare System. On July 19, 2010, Dr. Nitin Shah, anesthesiologist at the LBVA, presented the award to Dr. Cho during the urology grand rounds weekly conference.



**Shawn M. Beck, M.D.**  
 Clinical Instructor  
 Pediatric Urology  
 UC Irvine Department of Urology

After graduating from the Department of Urology residency training program in June 2010, Dr. Shawn Beck will be working as a clinical instructor with Dr. Tony Khoury, chief of pediatric urology at UC Irvine Department of Urology and Children's Hospital of Orange County.



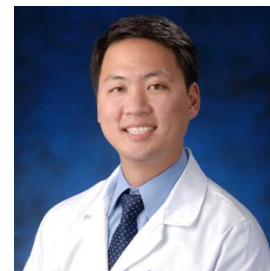
**Jennifer L. Young, M.D.**  
 Clinical Instructor  
 UC Irvine Department of Urology

Dr. Jennifer Young graduated from the Department of Urology residency training program in June 2010, and will be working as a clinical instructor in the Urology Patient Care Center at UC Irvine Medical Center.



**Sir Luke Fildes Award**

- ◆ **Commitment**
- ◆ **Compassion**
- ◆ **Competence**
- ◆ **Creativity of thought**



**William Sohn, M.D.**  
 Senior Resident  
 Department of Urology

**Congratulations to Dr. William Sohn  
 for being awarded the 2010 Sir Luke  
 Fildes Award**

The Department of Urology has established an award which may be given annually to a resident-in-training who has demonstrated exceptional abilities in provision of patient care. In this regard the painting, "The Doctor," by Sir Luke Fildes in 1891 embodies many aspects of the exemplary physician -- demonstrating commitment and compassion, communicating well with patients, families and colleagues, and excelling in scholarship using creativity and wonder in problem solving. As the first rays of morning sunlight come into the room, the painting shows that the physician's night was not in vain -- indeed, the child is beginning to rally and recover, a fate that sadly eluded Dr. Fildes' own child.

**Welcome  
 new urology residents  
 July 2010**

**Surendra Kolla, M.D.**  
 All India Institute  
 New Delhi, India

**Rachel Mueleners, M.D.**  
 University of Minnesota  
 Minneapolis, MN



**UC Irvine Summer Premed Program**  
**July 19-30, 2010**

SCHOOL OF MEDICINE  
 UNIVERSITY of CALIFORNIA · IRVINE

**A two-week "summer camp" program  
 for high school students from Orange County  
 provided an inside look at the life of a medical student**

This first-time pilot program for 30 high school students, included three students who were awarded scholarships. It was developed by three organizations, one of which was the Department of Urology Leadership Council members, **Walter Muratori** and **Rosanne Santos**, as a spin-off from the very successful High School Outreach Program initiated during the summer of 2008. This program was held in partnership with **Dr. Behnoosh Afghani**, director of the Center for Future Health Professionals, and **Marco Angulo**, **Sergio Figueroa** and **Nancy Anaya** from the UC Irvine Latino Medical Student Association (LMSA) to create a unique hands-on experience for the youth of Orange County.

The UC Irvine Premed Program is a two-week program dedicated to fostering the interest of high school students toward careers in medicine. This program combined didactic lectures given by distinguished UC Irvine faculty members and hands-on workshops to provide exposure to the medical field. All activities were geared toward a "sneak peek" at what it is like to be a medical student at UC Irvine.

The program activities included --

- ❖ clinical case studies
- ❖ suturing and surgery
- ❖ X-rays and ultrasound
- ❖ basic life support training
- ❖ vital signs workshop
- ❖ nutrition and health
- ❖ hospital "insiders" tour
- ❖ HIPAA and ethics training
- ❖ human anatomy lab
- ❖ casting and splinting
- ❖ research
- ❖ college development

The two-week session was held on the UC Irvine School of Medicine campus in Irvine, with two days at UC Irvine Medical Center in Orange.

A tuition fee of \$1,950 included meals, workshop materials, and transportation. The proceeds from this program will go toward funding the ongoing UC Irvine Urology - High School Outreach Program, the Center for Future Health Professionals, and the Division of Outreach for the LMSA throughout the school year.

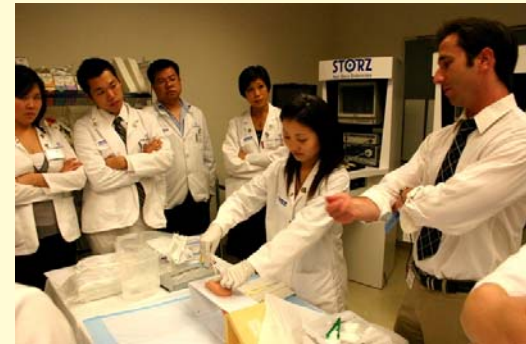
Next summer, the UC Irvine Summer Premed Program will hold two two-week sessions with 40 students in each class. Ten students in each class will be awarded a scholarship to attend the program. Please visit the website below for details. Applications will open in January 2011 and students will be accepted on a rolling basis.

**For information about next summer's program, please contact --**

**Rosanne Santos**  
**Phone: 714.456.8176**  
**E-mail: [summerpremed@uci.edu](mailto:summerpremed@uci.edu)**

**[www.som.uci.edu/SummerPreMed](http://www.som.uci.edu/SummerPreMed)**  
**[www.facebook.com/uci.summerpremed](http://www.facebook.com/uci.summerpremed)**

**UC Irvine medical student  
 genitourinary skills  
 training program  
 June 10-11 & 18, 2010**



**Medical students' hands-on laboratory training sessions**

The Department of Urology has created a dedicated curriculum to provide medical students entering their clinical clerkship with skills training sessions to provide basic genitourinary skills, directed by **Dr. Elspeth McDougall**.

Medical students need to have basic skills training in history and physical examination and medical techniques before starting their clinical clerkship training. The University of California, Irvine School of Medicine created a Clinical Foundations III during the month of June, just prior to students commencing third-year clinical clerkship, to review and teach these necessary basic skills. Students received a lecture by Dr. McDougall on "Foley catheter placement and genitourinary examination of the testis and prostate of the male patient." The laboratory hands-on training sessions included standardized patients for learning testis and rectal exams; Foley catheter placement in male and female models; and a discussion of abnormal testis and prostate exam findings.





## Department of Urology Upcoming Training Programs

## Give the Gift of Knowledge

The UC Irvine Anatomical Donation Program supports the education of health professionals and scientific research at the university. The medical students learn anatomy from the best of all teachers... the body itself.

**For additional information,  
please contact  
The Willed Body Program  
UC Irvine School of Medicine  
Office: 949.824.6061  
[www.som.uci.edu/willedbody](http://www.som.uci.edu/willedbody)**



**Claus G. Roehrborn, M.D.**

Professor and Chairman, Department of Urology  
E.E. Fogelson and Greer Garson Fogelson  
Distinguished Chair in Urology  
UT Southwestern Medical Center, Dallas, TX



**Sender Herschorn, M.D.**

Professor and Chairman, Division of Urology  
Sunnybrook Health Sciences Centre  
University of Toronto  
Toronto, Ontario, Canada

### **2010 John W. Posey Visiting Professorship December 9-11, 2010**

Dr. Roehrborn will be presenting lectures on management of benign and malignant prostate diseases, including medical and minimally invasive surgical therapies for BPH and markers for prostate cancer.

### **Visiting Professorship February 10-12, 2011**

Dr. Herschorn will be presenting lectures regarding his clinical and research studies, which include incontinence and voiding dysfunction, urodynamics and female urology.

**For course registration, please contact Cynthia Shell  
Phone: 714.456.5371  
E-mail: [cshell@uci.edu](mailto:cshell@uci.edu)**



**Department of Urology Faculty and Staff**



### **Congratulations to the Department of Urology**

**America's Best Hospitals List  
2009 - 2010  
UC Irvine Medical Center  
UC Irvine Douglas Hospital**

Congratulations to gynecology, **urology** and ear, nose and throat for being UC Irvine's specialties ranked in this year's *U.S. News & World Report's* America's Best Hospitals list.

SCHOOL OF MEDICINE  
UNIVERSITY of CALIFORNIA • IRVINE  
**Department of Urology**  
**Human Kindness**

**Your support today creates the healthcare of tomorrow.**

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(Checks must be drawn on a U.S. bank made payable in U.S. dollars)

- High School Outreach Program
- Surgical Training Center
- Bladder and Prostate Cancer Research Fund

Check is enclosed payable to: **UC IRVINE FOUNDATION**  
Federal Tax ID 95-2540117  
(Checks must be drawn on a U.S. bank made payable in U.S. dollars)

- Urology Resident Research and Education Fund
- Urology Nursing Education Fund
- Urologic Oncology Chair
- Pediatric Urology Chair

Your support is fully tax deductible to the extent of the law. Your help will greatly improve the quality of education for our urology residents and the quality of healthcare we provide the Orange County community. *In the unlikely event that private support does not fully fund the endowed chairs by the respective deadlines, the gifts received will be redirected to a current-use departmental fund that will support the surgical training center, urology research and education activities, and urology teaching endeavors.*

**Your gift to the Department of Urology  
helps advance education, research and patient care.**

- ❖ Discovering new medical knowledge and technology
- ❖ Educating the next generation of physicians, medical scientists and nurses
- ❖ Developing innovative technologies for the prevention, diagnosis and treatment of disease
- ❖ Providing healthcare services in an academic setting

Please mail this form to --

Veronica Razo  
Urology Business Office - Suite 2100  
UC Irvine Department of Urology  
101 The City Drive  
Orange, CA 92868  
Tel: 714.456.6726



# UC Irvine School of Medicine, Department of Urology Clinical and Staff Faculty and Volunteer Faculty



## Ralph V. Clayman, M.D.

Dean, School of Medicine  
Professor of Urology

Dr. Clayman is world renowned for his clinical and laboratory work in minimally invasive surgery. He specializes in the treatment of kidney stones, kidney cancer, strictures of the ureter and all other aspects of renal and ureteral diseases.

**For appointments and referrals, please call:  
714.456.7005**



## Tony E. Khoury, M.D.

Professor and Chief of Pediatric Urology  
Interim Chairman, Department of 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**



## Thomas E. Ahlering, M.D.

Professor and Vice Chairman

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 urological oncology at University of Southern California, Los Angeles.

**For appointments and referrals, please call:  
714.456.6068  
9 am - 3:45 pm**



## Atreya Dash, M.D.

Assistant Professor

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 minimally invasive surgical technologies such as laparoscopy to improve the care and convalescence of patients with urologic cancers.

**For appointments and referrals, please call:  
714.456.7005**

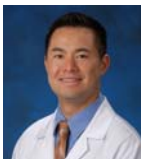


## Joel Gelman, M.D.

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, Virginia.

**For appointments and referrals, please call:  
714.456.2951**



## Michael Louie, M.D.

HS/Assistant Clinical Professor  
Director, Urology Residency Program

Dr. Louie specializes in enlargement of the prostate (BPH), the treatment of kidney stones, kidney cancer, strictures of the ureter and robotic-assisted prostatectomy. He completed his fellowship training in robotic and laparoscopic minimally invasive surgery at University of California, Irvine.

**For appointments and referrals, please call:  
714.456.7005**



## Elsbeth M. McDougall, M.D.

Professor of Urology and Director,  
UC Irvine Surgical Education Center

Dr. McDougall specializes in minimally invasive surgery for the treatment of kidney stones, kidney cancer 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, Missouri.

**For appointments and referrals, please call:  
714.456.7005**



## Leland Ronningen, M.D.

HS/Associate Clinical Professor

Dr. Ronningen provides and supervises all aspects of urologic care at the Long Beach Veteran's Hospital 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, Virginia.



## Anne R. Simoneau, M.D.

HS/Associate Clinical Professor  
Chief, Urology Service at the VA Long  
Beach Healthcare System

Dr. Simoneau has clinical trials in prostate cancer prevention and is collaborating with Dr. Zi on research in bladder cancer prevention. She did her postgraduate fellowship training in urological oncology at the University of Southern California.



## Aaron Spitz, M.D.

Staff Physician  
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, Texas.

**For appointments and referrals, please call:  
714.456.7005**



## Bernard Turbow, M.D.

Staff Physician  
Assistant Clinical Professor

Dr. Turbow specializes in general urology and supervises residents-in-training and medical students in the Urology Patient Care Center.

**For appointments and referrals, please call:  
714.456.7005**

### Your Urology Fall 2010, Issue 14

The urology newsletter is published biannually. We welcome your comments and ideas for stories. Please send them to Dr. Elspeth McDougall, editor, at cshell@uci.edu. Make sure to let us know if we have permission to reproduce your comment in full or in part in Your Urology. Copyright © 2010 The Regents of the University of California. All rights reserved.

Department Interim Chairman  
Tony E. Khoury, M.D.

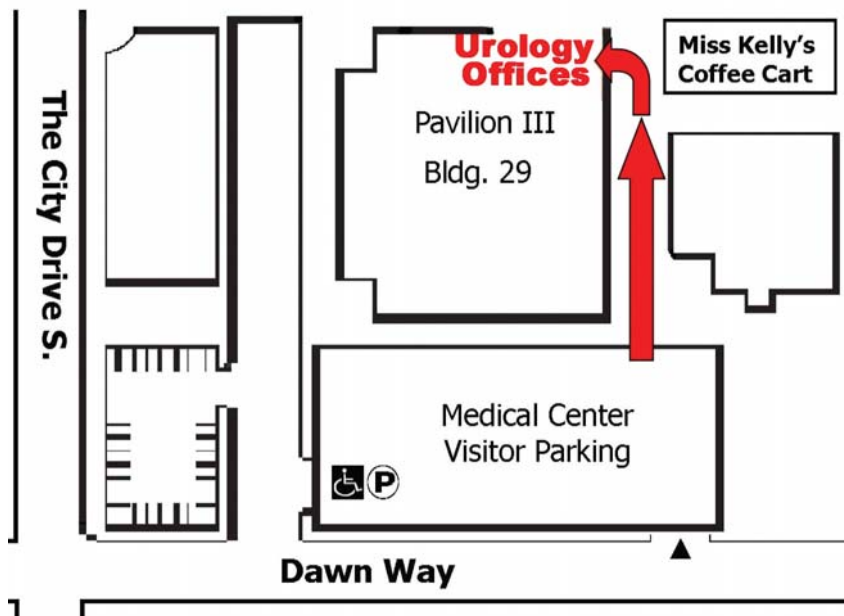
Newsletter Editor  
Elsbeth M. McDougall, M.D., FRCS

Newsletter Coordinator - Cynthia Shell

If you do not want to receive further communications from the Department of Urology, please contact Cynthia Shell.

UC Irvine Medical Center  
Department of Urology  
333 City Blvd. West, Suite 2100  
Orange, CA 92868  
Tel: 714.456.5371

# Department of Urology Patient Care Center



## Driving Directions to UC Irvine Medical Center --

From I-5 take the Chapman Avenue exit. Drive westbound on Chapman. Turn left (south) onto The City Drive South. Proceed to Dawn Way. Turn left. The UC Irvine Medical Center visitor parking structure is on the left side. Upon exiting the parking structure after parking, continue down the broad walkway until you see Miss Kelly's Coffee Cart on your right side. On your left side is the entry to the Pavilion III urology offices. If you are lost, please call 714.456.7005.