Stanford
UROLOGY NEWS
SUMMER 2007

Two New Faculty Join the Department

Joseph Liao, M.D. - New VA Chief of Urology

Dr. Liao received his AB in Biology magna cum laude from Harvard University in 1993 and his MD from Stanford University in 1997. He completed his urological residency training and chief residency at the UCLA School of Medicine. Following his residency, he remained on the staff at UCLA as a Clinical Instructor where he directed and largely instigated, as Co-Investigator, an NIH R01 entitled "Uropathogen Detection Using DNA Biosensors." During this time, he also started his MS in

cont on page 4

Benjamin Chung, M.D. – Assistant Professor

Dr. Chung graduated from Amherst College in 1995 with a BA in Classics. He received his MD from Jefferson Medical College in 1999 and completed 2 years of general surgical training at the Massachusetts General Hospital and then his urologic residency at the Lahey Clinic in Massachusetts in 2005. He completed an endourology/ laparoscopic/robotic urological fellowship at the Cleveland Clinic under the direction of Dr. Inderbil Gill. Dr. Chung has published papers on

cont on page 4

Robotic Assisted Radical Prostatectomy

Robotic (Da Vinci) assisted radical prostatectomy (RARP) is the newest innovation in urologic technique offered at both at Stanford Hospital and the Palo Alto VA. The robot itself is under the direct control of the operating surgeon at all times, in what is called a "master-slave" system. The operating surgeon sits at a console specifically designed to allow for total control. The surgeon looks into a binocular eyepiece system that allows him to view the surgical field under 3-D vision. The instruments, which are placed through small port site incisions, are maneuvered with hand controls that allow the operating surgeon extremely precise and fine control. These "wristed"

cont on page 2

Message from the Chair

Friends and colleagues:

Different from the rest of the University, at the medical center July is the time of new beginnings. This marks the entry of 3 new interns (Erik Kouba--UNC, Jen Liu--Stanford, Tin Ngo—Wake Forest; class of '13), 3 entering PGY3 urology residents or also known as URO-1 (Simon Kimm--Northwestern, Geoff Sonn--UCLA, William Tu—Vanderbilt; class of '11), and 2 new Chief Residents Debby Chao and Steven Chang (class of '08). They all have increasingly complex roles.

The challenges of residency education and training differ from previous decades. From the vantage of an enlarged, more diverse faculty representing many places and times, residency is not what it was for us. We try to manage the same clinical, research, and administrative activities in an environment of changing expectations. From the vantage of our residents, complexities of residency are both constrained and expanded by requirements, our expectations, changing multidisciplinary surgical and management approaches, issues of the "5 competencies", dealing with allied health personnel, concerns of clinical and research productivity, and new learning techniques and efficiencies, all of which must occur within the mandated 80 hours a week. We all must, moreover, maintain our sanity, integrity, civility, compassion, responsibility, and equity in treatment of

cont on page 4

... RARP

instruments are designed to allow for 90 degrees of articulation and 7 degrees of freedom, which is more than the human hand is capable of performing. In addition, the surgeon has complete control over the camera, allowing him to position it exactly where it is needed.

The Da Vinci Robot allows for the benefits of the minimally invasive approach, including decreased blood loss, decreased analgesic requirements, decreased post operative pain, and decreased recovery time. The advantages of the technique are many, including 3-D vision, fine "wristed" instruments which allow for seven degrees of freedom, and magnification of the surgical field, which allow for precise removal of the gland and sparing of the nerves responsible for erectile function. Nationwide, it is estimated that in 2007, approximately 40% of all prostatectomies will be performed with the robot, indicating its popularity and wide dissemination. At the VA, nearly all prostatectomies are being performed with the robot and at Stanford Hospital, the percentages appear to be in line with the nationwide trends. In fact, the recent increased utilization of the robot for prostatectomy at Stanford Hospital has brought on the need for dedicated robot prostatectomy block operating time to keep up with increased demand. The surgeons offering this technique at Stanford are Benjamin Chung, Harcharan Gill, and Thomas Hsu. The surgeons offering this technique at the Palo Alto VA are Benjamin Chung and Joseph Liao.

Our residents have the benefit of exposure to the robot at both Stanford and the VA. With cooperation from Intuitive Surgical, the manufacturer of the robot, we are integrating robotic training courses to allow the residents to become facile in this technique. With these measures, our residents will continue to be exposed to the new technologic advances which will change and improve the practice of urology.

Stanford Urology Ranks 14th in U.S. News & World Report, Stanford Hospitals and Clinics ranks 15th!

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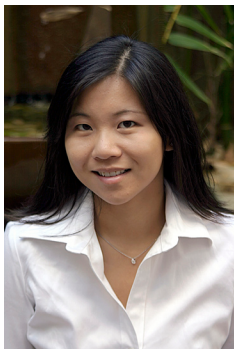
* These friends donated directly to the Leonardo J. Martin, M.D. Memorial Fund

Resident News

Matthew McCormack, M.D. and Kelly Morgan, M.D. will be completing their Urology Residency training on June 30, 2007. Matt will be joining the Nevada Urology Associates group. Kelly will be joining Kaiser Permanente Medical Center, Hayward/Fremont. Tatum Tarin completed his year as Biodesign Fellow. Steven Chang received the Traveling Resident Scholarship to India.

Welcome New Residents for 2007-2008

Jen-Jane Liu, M.D.



Jen-Jane graduated from Yale University (New Haven, CT) and received her medical training at the Stanford University School of Medicine. As a medical student at Stanford, she examined a rat model of ischemic stroke and the neuroprotective effects of hypothermia in Dr. Gary Steinberg's Neurosurgery laboratory. Jen enjoys playing the violin, listening to classical music, playing tennis, photography as well as volunteering at the Pacific Free Clinic.

Tin Chan Ngo, M.D.

Tin graduated from Yale University (New Haven, CT) and received his medical training at Wake Forest University School of Medicine (Winston-Salem, NC). While at Yale University he used a phage display system to create libraries of random mutations at a specific hydrophilic domain of a hyperstable protein scaffold and screened these libraries for novel binding sites. As a NIH Student Research Fellow he studied the recruitment of leukocytes to sites of tumor in cancer resistant mice using in vitro chemotaxis assays. He also enjoys cooking, gardening, dog training and has a active interest in Asian American community health.

Erik Kouba, M.D.

Erik graduated from Wake Forest University (Winston-Salem, NC). He also did post baccalaureate undergraduate studies in Biology at the University of North Carolina (Greensboro, NC). Erik received his medical training at the University of North Carolina School of Medicine (Chapel Hill, NC). As a medical student, Erik received a one year Doris Duke Foundation Clinical Research Fellowship. During that year he initiated research on a) inflammatory markers during radical prostatectomy and postoperative erectile dysfunction, b) measurement of visceral and subcutaneous adipose tissue depots and their relationship to outcomes after cystectomy, c) placebo controlled trial of ACE inhibitor Captopril and Ibuprofen for the treatment of benign prostatic hyperplasia, and d) cavernosal oxygen levels in men undergoing penile Doppler evaluation for erectile dysfunction. In addition to extensive community service at local hospitals, Erik's interests include fly fishing, fly tying, Civil War history, History of Medicine, running, racquetball and softball.

New Gallo Fellow

Hillary Copp, M.D.

Hillary joins us making history as the first Ernest Gallo Research Fellow in pediatric urology. The Gallo Research Fellowship was established by the Gallo family. It has funded past residents in research and now funds advanced fellows who have been selected for their promise in contributing to improving urologic care through their research efforts. Hillary comes back to the west coast where she previously graduated with her B.S. from the University of California at Santa Barbara. She received her medical training at Penn State and did her internship and residency at the University of Virginia in Charlottesville. Hillary has been a member of the AUA guidelines panel for Vesicoureteral Reflux and plans on pursuing a masters in Epidemiology while here at Stanford in anticipation of doing future pediatric clinical trials work. Outside of work, Hillary enjoys hiking, backpacking, snow skiing, travel and in particular, trail and marathon running. She's very excited about finally being able to run the Wharf to Wharf in Santa Cruz this year!

Resident Awards

Matthew McCormack was selected to receive the 2006 Richard Lo Award for the best Urology Resident Publication. Matt's winning entry was "A Novel Microfluidic Device for Male Subfertility Screening", published in Urology 175:2223-2227, 2006.

Larisa Nonn was selected to receive the 2006 David Packard Award for the Best Urology Postdoctoral Publication. Larisa's winning entry was "Inhibition of p38 by Vitamin D Reduces Interleukin-6 Production in Normal Prostate Cells via Mitogen-Activated Protein Kinase Phosphatase 5: Implications for Prostate Cancer Prevention by Vitamin D", in Cancer Research 66(8):4516-4524, 2006.

Both Matt and Larisa received awards of $1,000 for their winning papers. Congratulations to both!

Recent Grants/Contracts Awarded

Joe Liao has been awarded a 3-year VA Merit grant for his project, "A Biochip for Rapid Diagnosis of Complicated Urinary Tract Infections." The objective of this project is the development of a new biochip for rapid detection of pathogens and antibiotic susceptibility determination, with particular emphasis on urological and spinal core injury patients with complicated urinary tract infections.

Joe has also been awarded a Stanford Cancer Center Translational Research Seed Grant for 1 year. This project is entitled, "Optical Bipsy of Bladder Cancer Using Fibered Confocal Microscopy." This project's objective is to improve the

cont on page 4

our patients and colleagues.

To meet these challenges we retreat annually to work on improving the residency although whether we achieve our goals sometimes takes several years to assess. All in all these are difficult targets in difficult times in healthcare, but nevertheless a challenge that we face anew each year with renewed vigor, plans, and commitments.

It was wonderful to see many alumni who attended one of our largest Stanford Urology alumni lunches at the AUA 2007 meeting in Anaheim. I thank Rodney Anderson '76 who reserved a perfect site at the corner Morton's Steakhouse. It was a great time to renew relationships, meet new graduates, and learn about transitions. I introduced 3 new faculty: Joseph Liao from UCLA, Ben Chung from Cleveland Clinic and Lahey Clinic, and Craig Comiter from Arizona, UCLA, and the Brigham, and a new pediatric urology fellow: Hillary Copp from U. Virginia. We look forward to another Monday alumni luncheon at the AUA 2008 Orlando!

We bid farewell to Matt McCormack and Kelly Morgan who have joined the alumni ranks. I appreciate the gifts to the departmental research and education; we are blessed by generous past patients, friends, and alumni.

My best wishes for a safe and happy summer.

Linda

...Grants

diagnostic accuracy of bladder cancer by using a novel laser fiberoptic confocal microscope during cystoscopy.

Congratulations to Keith Syson who was awarded a K99 grant for his project, "Identification and characterization of bladder cancer stem cells." His preliminary study identified a cancer stem cell population in a small subset of patient bladder tumors based on the expression of the cell surface marker CD44 and the activation of beta-catenin, a protein implicated in self-renewal. The primary objective of this proposed research is to further purify this cancer stem cell population; to determine the biological properties and mechanism of activation for the beta-catenin signaling in this subset of bladder cancer; and to identify additional signaling pathways unique for bladder cancer stem cells by global gene expression profiles. This award will cover 2 years of postdoctoral and 3 years of faculty funding. Congratulations, Keith!

Stanford Urology News is published for current and former faculty, residents, physicians, and friends of the Department.
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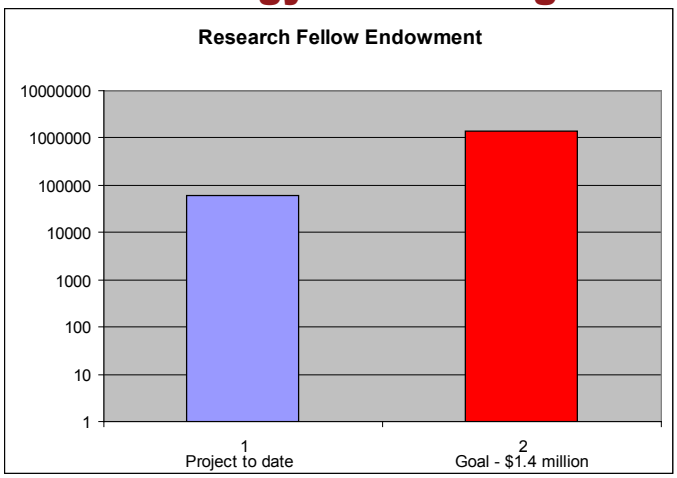
... Liao

Clinical Research from the Department of Biomathematics (pending) and completed a clinical fellowship in the Division of Endourology and Laparoscopic Surgery under the direction of Peter Schulam, M.D. PhD. Of his 12 publications, six are in basic science journals. He holds patents on two inventions related to his research.

... Chung

results of laparoscopic partial nephrectomy and nephrectomy for renal cell carcinoma among other urologic topics. Dr. Chung will divide his time between the VA and Stanford.

Urology Fundraising



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