I just reviewed an article for the Journal of Urology entitled, “The Gatekeeper Disparity: Why Do Some Medical Schools Send More Medical Students into Urology?”. The authors obtained the AUA Match data for the five Match seasons from 2005-2009. They then surveyed the successful participants to determine what aspects of the medical school experience influenced students to choose to specialize in Urology.

The results indicate that between 2005 and 2009, 1,149 medical students from 130 medical schools successfully participated in the Urology match. Of the 132 allopathic medical schools, 128 sent at least one student into Urology. A handful of medical schools were remarkable outliers, sending significantly more students into Urology than other institutions. Multivariate analysis revealed that a number of medical-school related variables including strong mentorship, medical school ranking, and medical school size correlated with more medical students entering into Urology.

The article states, “Twenty medical schools (12.5%) sent 15 or more of medical students (greater than 1 standard deviation from the median) into Urology. This small group of schools was responsible for educating 33% of the entire cohort entering Urology during this time. The most remarkable of these “outliers” is Northwestern University Feinberg School of Medicine, which sent 44 students into Urology between 2005 and 2009.” The school with the second most sent just 26.

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On February 1, 2011, forty years to the day from when he first began at Northwestern University, Chung Lee, PhD, stepped down from his position as Director of Research and John T. Grayhack Professor and transitioned to a part-time professor emeritus position in the Department of Urology.

Dr. Lee has devoted his life to the fight against cancer and his commitment and accomplishments can be seen in the complete transformation of the Department since Dr. Lee first arrived.

From a few cramped rooms, Dr. Lee has helped expand the Urology Research Department to more than an entire floor and the Department is now ranked #3 in the country for NIH funding.

“When I first arrived, I was the only PhD faculty in the Department. Now, we have at least 10. Definitely better. That means the Department is able to help a lot more patients,” says Dr. Lee.

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After nearly 20 years as the John T. Grayhack Professor, Dr. Lee felt it was time to pass on the baton to another passionate professor, eager to continue the battle he has fought since he first came to Northwestern in 1971. It was then he came to work with the late John Brewer in the Department of Obstetrics and Gynecology and was first introduced to the world of cancer research.

Since then, Dr. Lee has focused primarily on prostate cancer, which is responsible for nearly 180,000 new cases a year, and specifically on Transforming Growth Factor-Beta, a key signaling event in cancer development and progression. He has received funding from the NIH, US Department of Defense, and Ministry of National Education of Luxembourg for his study of TGF-B in the benign and malignant prostate.

“I use TGF-Beta as a means to combat cancer, but in an era of personalized medicine, we have a lot more opportunities and options to fight cancer. We must keep an open-minded attitude. We should study many signaling pathways if we want to cure cancer,” says Dr. Lee.

Having an open mind and a good attitude are two things central to Dr. Lee’s success as a researcher and leader. Born in Shanghai, China in 1936, Dr. Lee grew up in Taiwan and took his positive attitude to the United States when he came to West Virginia University for his undergraduate degree. Years later, he is still far from jaded and hopes to continue contributing to the Department for as long as possible as an emeritus faculty member.

“I am not leaving the Department completely, which would make me very sad. The Department of Urology is like my family. I cannot predict what will happen in the future, but I hope that people in the Department will continue to work together for the better to meet the challenges of a changing world.” Though Dr. Lee has received multi-million-dollar grants, including the prestigious NCI SPORE grant, his proudest memory from his time with the Department of Urology is having “the opportunity to interact with everyone in the Department”.

The admiration is mutual. Dr. Anthony Schaeffer applauds the knowledge, experience, and leadership Dr. Lee has contributed to the Department.

“Over the past 40 years, Chung competed successfully at the highest scientific levels, guided many, including myself, in the critical early phase of career development as a researcher, and motivated everyone to leave our environment better than when they found it,” says Dr. Schaeffer.

Dr. Lee has held the title of John T. Grayhack Professor since 1992, an honor Dr. Lee considers one of the greatest of his life. Bestowed with the stipulation that he make the Department proud, Dr. Lee has taken the challenge with fervor and done his best to earn the honor. He hopes the person who receives it next will use it with as much earnest as he has. While Dr. Lee’s drive to cure cancer may be intense, his personality is anything but and reflects a man who just wants to help people be happy.

“I have always tried to promote maintaining a positive attitude. I believe a happy personality is contagious. I am happy when I am in the Department.”
The AUA Meeting will be held in Washington D.C. this year and will aim to take advantage of its high profile location.

The meeting will feature many new additions, including a unique option to meet directly with the senators from the respective states of AUA members.

As always, an alumni dinner will be held and this year it will be at Acadiana on Sunday, May 15th.

Acadiana is located on New York Ave just two blocks southwest of the Convention Center.

Details were mailed to alumni the week of March 7th. The event coordinator is Brittani Miller (brittani-miller@northwestern.edu).
This past October, 5th year resident Lee Zhao, MD, took advantage of the Department’s elective option with a two week trip to Vietnam. Dr. Zhao visited the old imperial capital city of Hue in central Vietnam. There he joined several other visiting American residents from Duke and Virginia Commonwealth University to exchange knowledge and work with the local Urologists.

“Spending time with other residents from other programs is always a good experience. It is interesting to see how other training programs treat their residents and how the educational contents differ,” says Dr. Zhao, who added that it seemed like he had been exposed to a broader range of Urology at Northwestern than most residents from other schools.

Dr. Zhao was taken to work in Hue Central Hospital, which Dr. Zhao described as, “an impressive complex with swarms of patients and medical staff. It looked like a small city.” In comparison, the Urology Department was relatively small, comprised of only 10 patient rooms and 5 physician offices. No room was wasted, however, as each patient room housed up to 8 patients and the physician offices doubled as equipment storage rooms.

Dr. Zhao and the other residents had brought with them medical equipment which they presented to the chairman of the department. Items such as guidewires and catheters, which they took for granted, appeared to be hot commodities in Hue.

“It seemed that this supply of donated guidewires might be all that the department would use until Americans come again in 6 months,” says Dr. Zhao.

The visiting residents fell into a routine of surgery for about two or three hours in the morning, a break for lunch, and surgery for two more hours in the afternoon.

Differing from his time at Northwestern, Dr. Zhao noted he could easily scrub into six different cases per day, have time for lunch and still get home by 5 pm. A similar day back in the US would keep him in the hospital until 7 or 8 pm.

What Hue Hospital lacked in modern medical equipment they made up for in efficiency.

“I was impressed with how fast the Vietnamese surgeons were and that nothing was wasted in the hospital. Since all the surgical drapes were cloth, they were washed, re-sterilized, and re-used. It truly is amazing how much waste there is in the United States. In Vietnam, pretty much the only things which were thrown away were the gloves,” says Dr. Zhao.

Visiting Vietnam accomplished several important things. Dr. Zhao passed on his knowledge to the Urologists in Hue while gaining a valuable perspective on the practice of Urology without the high-tech equipment that dominates medical practice in the United States. And most importantly, it reinforced his goals for the future.

“Overall, this trip solidified my interest in international medical outreach, and I hope to work as a mentor for IVUmed (an international Urology education program) when I am an attending.”
Beginning July 1st, Northwestern will welcome three new fellows:

- **Endourology** — *Samuel H. Eaton, MD*
  
  Dr. Eaton comes to Northwestern after receiving his BS from the University of Illinois, his MD from Columbia and his residency at Boston University.

- **Andrology** — *Sherwin Zargaroff, MD*
  
  Dr. Zargaroff has vacillated between NY and IL, attending St. John’s University for his BS, Loyola for his MD, and Mount Sinai for residency.

- **Uro-oncology** — *Brian T. Helfand, MD, PhD*
  
  Dr. Helfand will begin his fellowship after graduating from Northwestern’s Urology residency program this summer. Dr. Helfand has been with Northwestern since acquiring his BS from Emory University in Atlanta.
Once a year, the Urology research faculty and staff come together to discuss new ideas for the future of the Department as well as reflect on the current state of affairs. In 2011, the day-long Urology Research Retreat was held on March 4th, in Prentice Women’s Hospital.

The retreat was attended by more than 40 members of clinical and basic science faculty, residents, clinical fellows, graduate students, postdoctoral fellows and laboratory research staff. The program for the retreat was divided into four sections split between morning and afternoon sessions with a poster presentation sandwiched in between. With an eye on the future, the session topics included “Experimental Therapeutics”, “Functional Imaging”, “Research tools”, and “Career development”.

After a short welcome message regarding the current state of research in the Department by Dr. Anthony Schaeffer, Dr. Andrew Mazar took to the podium for a speech entitled “Building the Northwestern Investigational Drug Pipeline: Emerging Opportunities through the New Center for Developmental Therapeutics”. Dr. Mazar, who is the Director of the Center for Developmental Therapeutics at Northwestern University, gave an overview of the developmental process in the Northwestern environment and concrete examples of drugs that have passed to the clinical trials stage. He also talked about the role of commercialization in drug discovery and the challenges that investigators face in taking ideas from the bench to the bedside.

The highlight of the day was the afternoon talk by Dr. Robin Steinhorn, Professor of Pediatrics and head of the Division of Neonatology at Northwestern. Her talk on developing an academic career was the most enthusiastically received and presented the audience with some personal vignettes which focused on how to establish a successful career while maintaining a balance of work and life. Something we all know can be no easy task.

Dr. Mazar’s talk in the morning was followed by Dr. Raymond Bergan, the Robert H. Lurie Comprehensive Cancer Center Director of Experimental Therapeutics, who spoke about the mechanics of taking a promising drug moiety and doing the step-wise process in converting this from a preclinical stage to a drug that enters clinical trials. He gave the audience a very effective glimpse into the process and challenges that accompany drug discovery.

The second part of the morning session dealt with “Functional Imaging” and the first speaker was Dr. Vania Apkarian, Professor of Physiology and Anesthesiology at Northwestern University, who spoke on “The Brain in Chronic Pelvic Pain”. Dr. Apkarian showed very useful and fascinating data using fMRI, indicating that different chronic pain states result in specific changes in brain blood flow, gross changes in brain anatomy and even changes in connectivity between brain areas. His talk was followed by Dr. Andrew Larson, the director of Northwestern’s Translational Interventional and Oncologic Imaging Group who spoke on the use of new and cutting “Diffusion-Weighted and Molecular MRI for Non-Invasive Diagnosis of Prostate Cancer”.

The lunch session was combined with a poster competition featuring 11 participants from basic and clinical Urology. The session resulted in thoughtful and engaging interaction between the research staff, faculty and students. The session was also very

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effective in exposing research staff and students to research questions in Urology that were important to the overall research direction of the Department. One faculty member called it "the best poster session so far".

The mood at the poster session was relaxed, but presenters had their game faces on for judges since up for grabs were cash prizes, decided on by a panel of faculty members from the Department.

The last segment of the program titled "Career Development" was kicked off by Marcie Weiss, the Assistant Dean for Faculty Affairs in the Feinberg School of Medicine of Northwestern University, who spoke on the academic appointment process, the new changes in faculty tracks, and the annual promotion and tenure process.

The afternoon session featured the only two speakers from the Urology Department as Dr. Jessica Casey, a third year Urology resident, and Dr. Christopher Gonzalez, Associate Professor in Urology, took to the podium. Dr. Casey spoke on the opportunities of the “Enterprise Data Warehouse” and its utilization in asking unique clinical research questions, while Dr. Gonzalez echoed Weiss’ points but from the point of view of a practicing Urologist. Dr. Gonzalez gave the audience valuable, relatable information, showing slides of trips with other doctors and giving examples of choices made by other well-known faculty members within the Department.

Before concluding, the winners of the poster competition were announced and it was Nicholas Angeloni from Dr. Carol Podlasek’s lab taking home 1st place. Second place and third place went to Dae Kim, who works in Dr. Shad Thaxton’s lab, and Soumi Mukherjee, out of Dr. Praveen Thumbikat’s lab, respectively.
In the last few years he has transitioned to a faculty position in Urology and has shifted his focus to understanding the mechanisms underlying inflammation and chronic pain in prostate disease. In particular, he is focusing his research on three major aspects of prostate disease: the innate immune response to prostate pathogens; the pathogenesis of acute to chronic disease transition; and the design and testing of mechanism-based therapeutics.

His ultimate goals are to provide an understanding of why the human prostate undergoes inflammation; how inflammation impacts diseases such as chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS), benign prostatic hyperplasia (BPH) and prostate cancer; and design targeted therapies that inhibit or modulate inflammation to affect therapeutic benefits in human patients.

Visit The Department of Urology on the web at: http://www.feinberg.northwestern.edu/depts/urology

Meet Assistant Professor Praveen Thumbikat, PhD

Praveen Thumbikat hails from the state of Kerala in Southern India where he received his doctoral degree in Veterinary Medicine in 1997. He then obtained his Master’s in 1999, working on immunotherapy in Pasteurellosis and moved to Minnesota where he went on to receive his PhD with Dr. Samuel Maheswaran working on RTX toxin biology.

His interest in pathogenesis stems from personal experience battling rheumatic fever in his early years and learning to appreciate that, far from being simplistic, the disease process is complex and there are many unknowns. His research training and background proved a natural fit in his move to medical research and the Northwestern community. During his NRSA-sponsored postdoctoral fellowship in the laboratory of Dr. Anthony Schaeffer and Dr. David Klumpp, he worked on uropathogenic *E. coli* pathogenesis in the bladder, delineating the adaptive immune response, and identifying unique roles for the uroplakin proteins in bladder biology.

Alumni in the News...

- Dr. Robert Brannigan interviewed by local ABC and NBC news for story on “Manopause”

- Dr. Ron Yap develops “Prostate Pal” app for mobile phones to help men with prostate problems

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