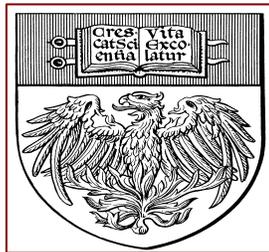


**THE UNIVERSITY OF CHICAGO MEDICAL CENTER
UROLOGY RESIDENCY TRAINING PROGRAM**

2013



Website: www.ucurology.org

Section Chief: Dr. Arie L. Shalhav

Program Director: Dr. Glenn S. Gerber

Participating Hospitals: University of Chicago Medical Center
NorthShore University Health Systems
Mount Sinai

Residency Coordinator: Ms. Joanne Swanson

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INTRODUCTION

The University of Chicago Medical Center is one of the leading academic institutions in the United States. More Nobel laureates have been affiliated with this University than any other institution in the world. The Section of Urology shares in this heritage as a result of the work of Dr. Charles Huggins, who was awarded the Nobel Prize in Medicine in 1966 for his discovery of hormone therapy for the treatment of advanced prostate cancer. The Section of Urology continues this commitment to excellence in clinical practice and basic research. The goals of our residency program are to provide excellent comprehensive clinical training in all aspects of urology and to create an atmosphere for discovery by providing active research training. Thus, we endeavor to provide our residents with the best training in clinical urology while enabling them to advance the science of urology through investigation.

SECTIONAL OVERVIEW UPDATE

In the past seven years there has been great transition and growth in the Section of Urology. Under the leadership of Dr. Arie Shalhav, five new full-time faculty members and additional senior and junior research personnel were successfully recruited and retained. During that time, surgical volume has tripled, mainly the number of complex adult and pediatric urology cases. Under the leadership of Dr. Carrie Rinker-Schaeffer, our Director of Research, our research program has undergone strategic reorganization. We now have two primary investigators and more than a dozen scientists at various stages of their careers working in our laboratory. Thus, both our clinical and research enterprises provide a superb training environment for residents in our program.

Our urology clinic is located in the Duchossois Center for Advanced Medicine (DCAM) at the University of Chicago Medical Center. This clinic has 5,000 square feet of space and includes two complete sets of 4 examining rooms each, a cystoscopy suite, and separate high end facilities with urodynamics and transrectal ultrasonography. This clinic was designed to allow further growth and to serve the needs of the section.

In February, 2005, the Comer Children's Hospital, a new 155 bed facility, opened. This hospital is directly across the street from the adult hospital and includes dedicated pediatric operating rooms as well as state-of-the-art neonatal and pediatric intensive care units.

In 2002, Dr. Arie Shalhav, who completed his laparoscopic urology fellowship at Washington University in St. Louis, was recruited from Indiana University to establish a program in minimally invasive urologic surgery. In less than five years, Dr. Shalhav has established the University of Chicago Medical Center as being one of the leading minimally invasive urology programs in the Midwest. He has built both a busy clinical and academically successful program. He and his colleagues have now performed more than 5,000 major minimally invasive surgical procedures, including over 3,000 robotic-assisted laparoscopic radical prostatectomies led by Dr. Gregory Zagaja. He has established both clinical and research fellowships. He also has an active animal research laboratory in which all residents receive training in minimally invasive surgery

SECTIONAL OVERVIEW UPDATE (CONT'D)

and in which there are several interesting ongoing research projects including a study on the effects of different energy devices on cavernosal nerve injury.

In 2006, Dr. Shalhav became the interim chief and in April, 2007, Dr. Shalhav assumed the leadership of the Section of Urology as the Fritz and Mary Lee Duda Family Professor.

In 2007, Dr. Glenn Gerber, a senior member of our faculty, was appointed the urology residency program director devoting a significant amount of his time managing the residency program. In 2010, Dr. Gerber led the resident complement increase from two to three residents per year.

In 2007, Dr. Mohan Gundeti joined our faculty as Assistant Professor, after completing his fellowship training in pediatric urology at the Great Ormond Street Hospital for Sick Children in London, England in 2006. Dr. Gundeti rapidly developed a practice in minimally invasive reconstructive pediatric urology. Our two PGY-4 (UR-3) residents each spend six months in pediatric urology.

In 2008, Dr. Scott Eggener joined the faculty as Assistant Professor after completing a three year urologic oncology fellowship at Memorial Sloan Kettering. Dr. Eggener's primary focus will be in patients with testis and kidney cancer.

In 2008, the University of Chicago Board approved a New Hospital Pavilion and began construction in 2009. This will be a high-technology facility that fosters collaboration and interaction among clinicians while providing a haven for patients and families dealing with complex illness. It provides 1.2 million square feet of space for 240 beds, 24 operating rooms, 7 interventional suites, state-of-the-art imaging scanners, and other advanced diagnostic and treatment services. The NHP will focus on the Medical Center's distinguished programs, including: cancer, gastrointestinal disease, neuroscience, advanced surgery and high-technology imaging. This facility is scheduled to open in 2013.

In 2008, NorthShore University Health Systems and the University of Chicago's Pritzker School of Medicine had agreed on an academic affiliation. Since that time the North Shore urology group, led by Dr. Michael McGuire, joined our team as affiliated faculty. We now place medical students, residents and fellows from the University of Chicago Medical Center at the three hospital locations in Evanston, Glenbrook, and Highland Park for a portion of their educational experience.

In 2009, Dr. Donald Vander Griend joined the faculty as Assistant Professor and Director of Urologic Stem Cell Research. Dr. VanderGriend received his Ph.D. in Cancer Biology from the University of Chicago. From there he conducted a post-doctoral fellowship at the Brady Urological Institute and the Department of Oncology at Johns Hopkins University in the laboratory of Dr. John Isaacs. His post-doctoral work focused on prostate stem cells as they relate to normal prostate function and androgen signaling. He continues his work on stem cells as they relate to carcinogenesis and differentiation.

SECTIONAL OVERVIEW UPDATE (CONT'D)

In 2010, Dr. Norm Smith joined the faculty as Associate Professor of Urology. He is an Associate Professor and Co-Director of Urologic Oncology. He was recently selected for the prestigious American Urological Association Leadership Program class of 2010-2011. His specialty interest is urologic oncology, and more specifically, bladder and prostate cancer.

In 2010, Dr. Doreen Chung, who completed her fellowship in voiding dysfunction, incontinence, and female urology at Weill Cornell Medical College and Memorial Sloan-Kettering Cancer Center, joined our faculty and is based primarily at Mount Sinai Hospital. Our three PGY-3 (UR-2) residents will each spend four months at Mount Sinai Hospital, working with Dr. Chung.

In 2010, Dr. Gary Steinberg was the recipient of an Endowed Chair from the Bruce and Beth White Family Professorship in Urologic Oncology. Dr. Steinberg is the head of our oncology program and today our bladder cancer program is one of the five most prominent in the country.

In 2011, Dr. David Rebeck joined our faculty and is based primarily at Mount Sinai Hospital with Dr. Doreen Chung and is training our residents.

In February, 2013 the University of Chicago opened their new hospital pavilion, The Center for Care and Discovery, on campus in Hyde Park. Our new hospital is a 10-story "hospital for the future" that serves as the new core of the campus of the University of Chicago Medicine. An architectural and technological tour de force, our new hospital provides a home for complex specialty care with a focus on cancer, gastrointestinal disease, neuroscience, advanced surgery and high-technology medical imaging. The CCD hospital contains 240 single-occupancy inpatient rooms including 60 intensive care beds; 28 operating rooms with leading-edge technology; two floors of expansion space for future technology; and an integrated diagnostic and interventional platform including cardiac, gastrointestinal, neurological and vascular services.

UROLOGY FACULTY
University of Chicago Clinical Faculty

<u>Name</u>	<u>Rank</u>	<u>Date of Recruitment</u>	<u>Area(s) of Expertise</u>
Arieh L. Shalhav, M.D.	Fritz and Mary Lee Duda Family Professor Chief of Section Director of Minimally Invasive Surgery	2002	Laparoscopy/ Minimally Invasive Surgery
Gregory T. Bales, M.D.	Associate Professor	1995	Female Urology Incontinence Pelvic Reconstruction
Scott E. Eggener, M.D.	Associate Professor	2008	Urologic Oncology
Glenn S. Gerber, M.D.	Professor Director of Endourology Residency Program Director	1991	Endourology Benign Prostatic Hyperplasia
Mohan S. Gundeti, M.D.	Associate Professor	2007	Minimally Invasive/ Reconstructive Pediatric Urology
Norm D. Smith, M.D.	Associate Professor	2010	Urologic Oncology
Gary D. Steinberg, M.D.	Bruce and Beth White Family Professor Vice Chairman & Director of Urologic Oncology Fellowship Program Director	1994	Urologic Oncology Pelvic Reconstruction
Gregory P. Zagaja, M.D.	Associate Professor	1998	Urologic Oncology

Mount Sinai Clinical Faculty

Doreen E. Chung, M.D.	Clinical Assistant Professor	2010	Female Urology Incontinence Pelvic Reconstruction
David Rebeck, M.D.	Clinical Associate Professor	2011	Endourology

NorthShore Health Systems Clinical Faculty

<u>Name</u>	<u>Rank</u>	<u>Date of Recruitment</u>	<u>Area(s) of Expertise</u>
Michael McGuire, M.D.	Clinical Assistant Professor Chief of the Division of Urology-North Shore	2008	Urologic Oncology General Urology Pediatric Urology
Michael Blum, M.D.	Clinical Assistant Professor	2008	General Urology
Charles Brendler, M.D.	Clinical Professor	2008	Urologic Oncology
Peter Colegrove, M.D.	Clinical Instructor	2008	General Urology
Brian Helfand, M.D.	Clinical Instructor	2013	Urologic Oncology
Thomas Keeler, M.D.	Clinical Assistant Professor	2008	General Urology Pediatric Urology and Incontinence
Amanda Macejko, M.D.	Clinical Instructor	2008	General Urology Minimally Invasive Surgery and Kidney Stones
Kristian Novakovic, M.D.	Clinical Assistant Professor	2011	Urologic Oncology Robotic and Computer Assisted Surgery
Sangtae Park, M.D.	Attending Urologist Chief of Minimally Invasive Urology	2010	Urologic Oncology Robotic and Computer Assisted Surgery

Northwestern Clinical Faculty

William W. Lin, M.D.	Clinical Associate Professor	2009	Male Infertility
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University of Chicago Clinical Fellows

<u>Name</u>	<u>Rank</u>	<u>Date of Recruitment</u>	<u>Area of Expertise</u>
Sanjay Patel , M.D.	Clinical Fellow	2013	Minimally Invasive Urologic Oncology
Kyle Richards, M.D.	Clinical Fellow	2012	Minimally Invasive Urologic Oncology
Rodrigo Ledzema Rojas, M.D.	Clinical Fellow	2012	Minimally Invasive Urologic Oncology

Research Faculty

Carrie W. Rinker-Schaeffer, Ph.D.	Professor Director of Urologic Research	1994	Prostate Cancer (Metastasis Suppressor Genes)
Donald J. Vander Griend, Ph.D.	Assistant Professor Director of Urologic Stem Cell Research	2009	Prostate Cancer (Stem Cell Biology)
Walter M. Stadler, M.D.	Professor of Medicine and Surgery Associate Dean of Clinical Research Director, Genitourinary Program	1997	Bladder Cancer (Molecular Markers of Invasion)

Research Fellows

Edris Negron, M.D.	Research Fellow	2012	Minimally Invasive Urologic Oncology
Aria Razmaria, M.D.	Research Fellow	2012	Minimally Invasive Urologic Oncology

Clinical Faculty with Joint Appointment in Urology

Tatjana Antic, M.D.	Assistant Professor of Pathology	2009	Genitourinary Pathology
Kate A. Feinstein, M.D.	Professor of Radiology and Surgery Section Chief, Pediatric Radiology	2005	Uroradiology
Aytekin Oto, M.D.	Professor of Radiology Section Chief, Abdominal Imaging	2010	Prostate Cancer
Gladell P. Paner, M.D.	Assistant Professor of Pathology	2010	Urologic Cancer
Jerome B. Taxy, M.D.	Professor of Pathology	2006	Urologic Cancer

CURRICULUM GOALS AND OBJECTIVES

The broad goals of the urology residency are foremost to educate residents so that at the completion of their training they are capable of providing comprehensive and expert care independently to patients suffering from adult and pediatric urological diseases. In addition, the program is designed to provide an opportunity for residents to engage in research activities and teaching of other residents and medical students so that they will have a foundation in these areas should they wish to pursue a career in academic urology.

To achieve these goals, the full and part time faculty are committed to developing an organized program of diverse clinical activities, a rigorous and comprehensive conference schedule, guidance and support in clinical and laboratory research activities, and supervision commensurate with the resident's level of ability in clinical patient care.

Resident progress is reviewed individually every six months. Residents evaluate the urology program annually, anonymously critique the quality of their training, and make recommendations to improve the program.

All full time faculty are required to participate in all of the activities of the Section of Urology. Faculty directly supervise all clinical activities of the residents, particularly in the operating room, where faculty work closely with the residents to develop surgical skills. In addition, the residents spend dedicated mentored time with the faculty in the different subspecialty urology clinics. The faculty are required to attend urologic conferences, and they are expected to be available for consultation with residents regarding clinical problems and personal matters should residents wish to bring them to their attention. We believe it is important for the faculty to assess resident attitudes, and to educate residents to deliver comprehensive and compassionate medical care with full regard for the complex ethical considerations that encompass the practice of medicine.

Competency-Based Goals and Objectives, Section of Urology, University of Chicago:

PGY-2 - The first year in Urology (UR-1) is spent on the Adult Urology service at the University of Chicago Hospital (8 months) and at NorthShore University Health Systems (4 months).

Adult Urology Rotation (UCH):

1. Outpatient:
 - a. obtains complete and accurate patient histories
 - b. performs thorough and appropriate physical exam
 - c. orders and interprets appropriate laboratory and radiological tests
 - d. integrates information meaningfully and coherently
 - e. generates appropriate differential diagnosis
 - f. is able to identify and discuss pathophysiology of urologic disease processes
 - g. can intelligently discuss diagnosis, evaluation and treatment of common urologic disorders

CURRICULUM GOALS AND OBJECTIVES (cont'd)

- h. applies knowledge to solve clinical dilemmas
 - i. understands rationale for varied approaches to clinical problem
 - j. able to perform basic urologic studies including: urine analysis, bladder scan, transrectal ultrasound and biopsy of the prostate and urodynamic studies
2. Inpatient:
- a. develops appropriate evaluation and treatment plan for preoperative and postoperative patients
 - b. can discuss rationale and risks of commonly performed surgical cases
 - c. reads about surgical procedures in advance
 - d. demonstrates surgical proficiency and technical ability during endoscopic procedures such as cystoscopy, ureteroscopy and percutaneous renal surgery
 - e. demonstrate surgical proficiency in ESWL
 - f. demonstrates surgical proficiency and technical ability during commonly performed open surgical procedures
 - g. demonstrates surgical proficiency and technical ability during laparoscopic procedures
 - h. effectively identifies and manages postoperative clinical problems
 - i. plans outpatient follow-up visits as needed

Goals and Objectives for PGY-2 (UR-1) Year:

At the conclusion of the first year in Urology, residents should demonstrate sufficient progress in the components of clinical competence that allows them to function as integral team members. Specifically, the residents acquire the necessary skills of data gathering, medical knowledge and clinical acumen. Under the supervision of the attending staff and senior residents, the first year urology residents gain experience in cystoscopy, other endourologic procedures and assist on more complex open and laparoscopic urological procedures.

Competency based goals and objectives for PGY-2 year (UR-1) at University of Chicago Hospitals:

1. Interpersonal and communication skills: First year residents should learn to interact with the other members of the urology team in communicating medical information and function appropriately as team members. The resident is expected to communicate effectively with patients, families and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds, as well as with physicians and other health professionals. . The resident should work effectively as a member or leader of a health care team and act in a consultative role to other physicians and health professionals. The resident should maintain comprehensive, timely and legible medical records.
2. Medical knowledge: First year residents should acquire knowledge of basic urologic disease processes, their evaluation and treatment. Residents should become competent in a basic assessment of the urologic patient. Residents should acquire introductory level knowledge base regarding pathophysiology of

CURRICULUM GOALS AND OBJECTIVES (cont'd)

common urologic conditions including obstructive uropathy, urologic malignancy, voiding dysfunction and stone disease. Residents should gain familiarity with the assessment of urologic emergencies as well as develop a knowledge base regarding interpretation of urologic radiography.

3. Patient care: First year residents should acquire basic information and knowledge concerning the management of patients with urologic diseases. The resident is expected to provide patient care that is compassionate, appropriate, and effective to the treatment of health problems and the promotion of health. In the outpatient clinic and emergency room, the resident is expected to perform a complete urologic history and physical examination and based on this information the resident should be able to order appropriate diagnostic procedures in a cost effective manner. The resident should be able to perform a thorough and competent cystoscopic examination of the bladder using flexible and rigid instruments and be able to place ureteral stents and perform retrograde pyelography. The resident should be able to perform basic scrotal and genital surgical procedures such as hydrocele repair, circumcision and vasectomy.
4. Practice based learning and improvement: First year residents should use their exposure to patients with urologic diseases to help guide their self directed learning of urology. The resident is expected to locate, appraise and assimilate evidence from scientific studies related to their patients' health problems and use information technology to optimize learning. The resident is expected to participate in the education of patients, families, students, residents and other health professionals.
5. Professionalism: First year residents should learn how to interact in a professional manner with peers, patients and other health care professionals. The resident will demonstrate compassion, integrity and respect for others. The resident will show respect for patient privacy and autonomy.
6. System Based Practice: First year residents should begin to understand proper use of medical resources in the management of urologic patients. The resident is expected to coordinate patient care within the health care system relevant to Urology and incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population based care as appropriate.

Competency based goals and objectives for PGY-2 year (UR-1) at Evanston Hospital:

1. Interpersonal and communication skills: The first year resident should develop skills in communicating with other health professionals in the inpatient and outpatient settings. The resident should communicate effectively with patients, families and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds. The resident should communicate effectively with physicians, other health professionals and health related agencies.
2. Medical knowledge: The resident should demonstrate a growing fund of knowledge concerning urologic diseases, their management and surgical procedures. Overall, the resident should demonstrate knowledge of established and evolving biomedical, clinical and epidemiological and social-behavioral sciences, as well as the application of this knowledge to health care. The resident should gain familiarity with the day to day practice of urology in a

CURRICULUM GOALS AND OBJECTIVES (cont'd)

community setting and obtain graduated surgical experience training with a diverse population of urologists.

3. Patient care: The resident should be able to manage urologic patients with a variety of problems and complications and develop appropriate treatment plans in the care of these patients. Overall, the resident should provide patient care that is compassionate, appropriate and effective to the treatment of health problems and the promotion of health. The resident should be able to perform a complete urologic history and physical examination in the emergency room, outpatient clinic or for in patient consultations and based on this information the resident should be able to order appropriate diagnostic procedures in a cost effective manner. The resident should be able to discuss the differential diagnosis of straight forward urologic problems and develop a rational therapeutic plan for the patient.
4. Practice based learning and improvement: The resident should apply his/her clinical experience to focus his/her reading and learning of urologic diseases and their management. The resident is expected to locate, appraise and assimilate evidence from scientific studies related to the patients' health problems and use information technology to enhance learning. The resident should participate in the education of patients, families, students, residents and other health professionals.
5. Professionalism: The resident should be an example of professionalism for students and other health professionals with regard to interaction with patients and families and co-workers. The resident will demonstrate compassion and integrity and respect for others. The resident will be responsive to patient needs and respect patient privacy and autonomy.
6. System based practice: The resident should have an understanding of the proper use of medical resources and how to use these to manage urologic patients. The resident should advocate for quality patient care and optimal patient care systems and work in inter-professional teams to enhance patient safety and improve patient care quality. The resident should participate in identifying system errors and implementing potential systems solutions.

PGY-3 - The second year in Urology is spent on the adult urology service at the University of Chicago (four months), on the pediatric urology service at the University of Chicago (four months), and at Mount Sinai Hospital (four months).

Goals and Objectives for PGY-3 (UR-2) year:

The second year residents build on past experiences both clinically and surgically, allowing them to develop as critical thinkers and assume a team leadership role. The residents are afforded increasing responsibilities including the primary management of inpatient consultations. The residents perform more complex endoscopic and open surgical procedures. PGY-3 residents are expected to become more proficient in procedures such as inguinal and genital surgery and with laparoscopic procedures, such as pelvic lymphadenectomy and radical prostatectomy.

CURRICULUM GOALS AND OBJECTIVES (cont'd)

Mount Sinai Rotation:

- 1) Outpatient
 - a. Obtains complete and accurate patient histories
 - b. Performs thorough and appropriate physical exam
 - c. Orders and interprets appropriate laboratory and radiological tests
 - d. Integrates information meaningfully and coherently
 - e. Generates appropriate differential diagnosis
 - f. Is able to identify and discuss pathophysiology of urologic disease processes
 - g. Can intelligently discuss diagnosis, evaluation and treatment of common urologic disorders
 - h. Applies knowledge to solve clinical dilemmas
 - i. Understands rationale for varied approaches to clinical problem
 - j. Able to perform basic urologic studies including : urinalysis, bladder scan, transrectal ultrasound and biopsy of the prostate and urodynamic studies

- 2) Inpatient
 - a. Develops appropriate evaluation and treatment plan for preoperative and postoperative patients
 - b. Can discuss rationale and risks of commonly performed surgical cases
 - c. Reads about surgical procedures in advance
 - d. Demonstrates surgical proficiency and technical ability during endoscopic procedures such as cystoscopy, ureteroscopy and percutaneous renal surgery
 - e. Gains proficiency in the diagnosis, management and treatment of urological trauma patients
 - f. Demonstrates surgical proficiency and technical ability during commonly performed open surgical procedures
 - g. Effectively identifies and manages postoperative clinical problems
 - h. Demonstrates surgical proficiency and technical ability during commonly performed laparoscopic surgical procedures
 - i. Plans outpatient follow-up visits as needed

Competency based goals and objectives for PGY-3 year (UR-2) at University of Chicago Hospital (Adult):

1. Interpersonal and communication skills: Second year residents should begin to assume a leadership role in communicating with medical students and junior residents, as well as honing their interpersonal skills when seeing inpatient consults and dealing with other health professionals and patients in the hospital. The resident is expected to communicate effectively with health related agencies as appropriate as well as physicians and other health care providers.
2. Medical knowledge: Second year residents should continue to improve their fund of knowledge concerning urologic issues and disease processes. The resident is expected to demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.

CURRICULUM GOALS AND OBJECTIVES (cont'd)

3. Patient care: Second year residents should be able to provide more independent patient care and develop treatment plans on their own. The resident should be able to perform and assess a urodynamic evaluation in the context of the patient's urologic complaint. The resident should be able to perform upper urinary tract endoscopic procedures such as ureteroscopic stone removal and percutaneous nephrolithotomy.
4. Practice based learning and improvement: Second year residents should further develop their integration of clinical information and translate this into self directed learning. The resident is expected to be able to locate and use data from published scientific journals and relate this information to their patients' health issues. Residents should participate in the education of patients, families and other health professionals in the areas relevant to Urology.
5. Professionalism: Second year residents should continue to polish their skills in professionally interacting with patients and other health care workers. The resident will demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity of gender, age, culture, race, religion, disabilities and sexual orientation. The resident will demonstrate accountability to patients, society and the profession.
6. System based practice: Second year residents should learn to further properly use health care resources and formulate efficient treatment plans. The resident is expected to work in inter-professional teams to enhance patient safety and improve patient care quality. The resident should function as an advocate for quality patient care and optimal patient care systems.

Competency based goals and objectives for PGY-3 year (UR-2) at University of Chicago Hospital (Pediatric):

1. Interpersonal and communication skills: Second year residents should begin to assume a leadership role in communicating with medical students and junior residents, as well as honing their interpersonal skills when dealing with other health professionals, pediatric patients and their families. The resident is expected to communicate effectively with health related agencies as appropriate as well as physicians and other health care providers.
2. Medical knowledge: Second year residents in pediatrics should learn about pediatric urologic disease processes and issues. The resident is expected to demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.
3. Patient care: Second year residents on pediatrics should be able to provide more independent care and develop treatment plans on their own. The resident should be able to perform and assess urodynamic evaluation in children with voiding dysfunction of varying types. The resident should be able perform pediatric endoscopic procedures as well as orchiopexy, circumcision, hernia repair and other straightforward pediatric open procedures.
4. Practice based learning and improvement: Second year residents should further develop their integration of clinical information and translate this into self directed learning. The resident is expected to be able to locate and use data from published scientific journals and relate this information to their pediatric patients'

CURRICULUM GOALS AND OBJECTIVES (cont'd)

health issues. Residents should participate in the education of patients, families and other health professionals in the areas relevant to pediatric urology.

5. Professionalism: Second year residents should continue to improve their skills in interacting with patients and other health care workers. The resident will demonstrate sensitivity and responsiveness to a diverse patient population. The resident will demonstrate accountability to patients, society and their profession.
6. System based practice: Second year residents should learn to further properly use health care resources and formulate efficient treatment plans. The resident is expected to work in inter-professional teams to enhance patient safety and improve patient care quality. The resident should function as an advocate for quality patient care and optimal patient care systems.

Competency based goals and objectives for PGY-3 year- Mt. Sinai Hospital:

1. Interpersonal and communication skills: Second year residents should interact appropriately with other health professionals and communicate clinical information to faculty and other health providers. The resident is expected to maintain complete medical records in a timely fashion that are legible and appropriate. The resident should communicate in an effective manner with patients and their families across a broad range of socioeconomic and cultural backgrounds.
2. Medical knowledge: Second year residents should improve their overall fund of knowledge but should have appropriate knowledge in the management of urologic trauma patients. The resident is expected to demonstrate knowledge of urologic disease processes and be able to apply this information in a variety of patient care settings including the outpatient clinic, emergency room and for in patient consultations. The resident should have a thorough knowledge of the evaluation and management strategies associated with patients presenting with urologic trauma including renal, bladder, ureteral and injuries to the male genitalia.
3. Patient care: Second year residents should be able to provide independent care of urologic patients and decide on appropriate evaluation and management of urologic trauma patients. Residents should have a working knowledge of urologic cancers, their evaluation and clinical staging and the options for treatment and follow-up. Residents should be able to interpret basic urologic imaging including ultrasonography of the kidney and scrotum and CT scans of the abdomen and pelvis. In the operating room, residents should be able to perform ureteroscopic stone removal. Residents should be capable of performing abdominal and retroperitoneal exploration for renal, ureteral and bladder trauma and assist in repair of injuries to these structures.
4. Practice based learning and improvement: Second year residents should further develop their integration of clinical information and translate this into self directed learning. Residents are expected to be able to use information technology to optimize learning. Residents are expected to be able to read the published literature in urology and use this information in the day to day treatment of patients in the outpatient clinic, operating rooms, emergency room and for in patient consultation.

CURRICULUM GOALS AND OBJECTIVES (cont'd)

5. Professionalism: Second year residents should continue to improve their skills in professional interactions with faculty, patients and other health care professionals. The resident will demonstrate responsiveness to patient needs that supersedes self interest. The resident will demonstrate compassion, integrity and respect for others.
6. System based practice: Second year residents should use appropriate health care resources and coordinate care properly for trauma patients in a cost efficient and effective manner. The resident should incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population based care as appropriate. The resident should participate in identifying system errors and implementing potential systems solutions.

PGY-3R Year - The third year in Urology is spent primarily in the Urology research lab with no call or clinical obligations other than the Infertility rotation.

Goals and Objectives for PGY-3R Year:

The PGY-3R year is devoted almost entirely to research. The urology research laboratories are located immediately adjacent to and opposite from the urology administrative offices. During the PGY-3R year, urology residents are encouraged to complete independent research projects under the supervision of the Urology faculty. During the PGY-3R year, residents also receive training in infertility. The two PGY-3R residents spend time with Dr. William Lin learning the diagnostic evaluation and treatment of male infertility. The PGY-3R residents have no call or clinical responsibilities on the urology service at the University of Chicago.

Infertility Rotation:

- a. Demonstrate a thorough understanding of the physiology and pathophysiology of male reproduction, including the process of spermatogenesis.
- b. Understand the embryology, anatomy and physiology of the male reproductive system.
- c. Understand and be able to perform a comprehensive diagnostic evaluation of the infertile male.
- d. Demonstrate knowledge of the commonly performed diagnostic and therapeutic procedures for male factor infertility including the techniques available, indications for each procedure, potential complications and success rates.
- e. Gain exposure to the basic microsurgical techniques used in the surgical treatment of male infertility.

Competency based goals and objectives for PGY-3R year:

1. Interpersonal and communication skills: Third year research residents should learn how to interact and communicate with laboratory personnel in day to day activities and in research conferences. Residents should be able to perform lectures at the research conferences that appropriately convey their work and its impact on the overall field. They should be able to effectively communicate their research findings in informal and formal

CURRICULUM GOALS AND OBJECTIVES (cont'd)

- settings demonstrating their understanding and knowledge of the work.
2. Medical knowledge: Third year research residents should learn the basic techniques appropriate to their projects and their applicability to clinical medicine. Residents should be knowledgeable about the hypothalamic-pituitary axis and understand the disease processes involving this area that impact on male fertility. Residents should have a thorough understanding of the physiology of sperm and semen production and know the disease processes that can cause abnormalities leading to male infertility.
 3. Patient care: Third year research residents should understand the principles of caring for infertility patients and their partners. Residents should be able to conduct a routine work up for infertility. Residents should be able to perform a varicocelectomy and assist in scrotal microsurgical procedures such as vaso-vasostomy and vaso-epididymostomy.
 4. Practice based learning and improvement: Third year research residents should use their exposure to infertility patients to foster their reading and understanding in this area. The residents should demonstrate the ability to read basic science literature relevant to their research project and assimilate this information to improve their understanding of the projects in which they are participating.
 5. Professionalism: Third year research residents should interact professionally with members of their research lab and learn the protocols of basic research work. The resident will demonstrate respect for the privacy of patients and their families that are participating in medical research.
 6. System based practice: Third year research residents should gain an understanding of the costs and benefits associated with the evaluation and treatment of men with male infertility. The resident should be able to incorporate cost considerations and risk benefit analysis in the evaluation and treatment of infertility.

PGY-4 - The third year in Urology is spent on the adult service at University of Chicago Hospital (3 months), the pediatric service at University of Chicago Hospital (6 months) and NorthShore University Health Systems (3 months).

Goals and objectives for PGY-4 year:

At the completion of the pediatric urology rotation, PGY-4 residents should be proficient in the evaluation and management of pediatric urology patients and should be able to perform fundamental procedures such as pediatric endoscopy, pyeloplasty, ureteroneocystostomy and anterior hypospadias repair. Many of these surgical procedures are performed using magnification and microsurgical instruments, and, therefore, residents receive considerable experience in microsurgical technique during the pediatric urology rotation. At the beginning of the PGY-4 year, the residents are capable of making independent decisions based on previous clinical experiences. As they progress through this year, the residents develop the ability to recognize and manage both the medical and surgical complexities of urologic disease, allowing them

CURRICULUM GOALS AND OBJECTIVES (cont'd)

to perform at the level of the senior resident.

Pediatric Urology Rotation (UCH):

- 1) Outpatient:
 - a. obtains complete and accurate pediatric histories through parent
 - b. performs thorough and appropriate physical exams
 - c. orders and interprets appropriate laboratory and radiological tests
 - d. integrates information meaningfully and coherently
 - e. generates appropriate differential diagnosis
 - f. is able to identify and discuss embryology/pathophysiology of pediatric urologic disease
 - g. can intelligently discuss diagnosis, evaluation and treatment of common pediatric urologic disorders
 - h. applies knowledge to solve clinical dilemmas
 - i. understands rationale for varied approaches to clinical problem
 - j. able to perform pediatric urodynamic studies
- 2) Inpatient:
 - a. develops appropriate evaluation and treatment plan for preoperative and postoperative pediatric patients
 - b. can discuss rationale and risks of commonly performed surgical cases with patient and parent
 - c. reads about surgical procedures in advance
 - d. demonstrates surgical proficiency and technical ability during
 - e. endoscopic procedures such as pediatric cystoscopy, ureteroscopy
 - f. demonstrates surgical proficiency and technical ability during commonly performed open surgical procedures: pyeloplasty, ureteroneocystostomy, hypospadias repair
 - g. effectively identifies and manages postoperative clinical problems
plans outpatient follow-up visits as needed

Competency based goals and objectives for PGY-4 year- Pediatrics

1. **Interpersonal and communication skills:** The PGY-4 resident on pediatrics should hone his/her skills at communication and interaction with children with urologic diseases and their families. The resident is expected to communicate effectively with patients and their families concerning pediatric urologic disease processes across a broad range of socioeconomic and cultural backgrounds. The resident should be able to communicate effectively with pediatricians and other health care professionals involved in the management and treatment of children. The resident should maintain comprehensive, timely and legible medical records on pediatric patients.
2. **Medical knowledge:** The PGY-4 resident on pediatrics should enhance their fund of knowledge in pediatric urology. The resident should understand the specific disease entities including hypospadias, congenital anomalies of the bladder, testis and penis, voiding dysfunction in children, urinary tract infections and urologic malignancies in the pediatric

CURRICULUM GOALS AND OBJECTIVES (cont'd)

population. The resident should gain a better understanding of radiologic

and pathologic diagnostic tests and to interpret radiographs and pathology specimens in a pediatric population. This will be accomplished through regular attendance and organizing of the pediatric conferences. The resident should acquire sufficient expertise to render a consultation in the emergency room setting or in patient unit for inpatient pediatric urologic disease processes.

3. Patient care: The PGY-4 resident on pediatrics should develop skills in caring for children with urologic disease processes. The resident should provide patient care in the clinic and in patient unit that is compassionate, appropriate and effective to the treatment of health problems and the promotion of health. The resident should perform basic pediatric urologic surgery under faculty guidance including but not limited to surgical correction of maldescended testes, hernia and hydrocele. The resident should develop skill to allow participation as a first assistant in complex pediatric reconstructive procedures pertaining to congenital anomalies and malignancies. In the operating room, the resident should be able to perform a pyeloplasty, ureteral reimplantation, orchiopexy and circumcision. The resident should be able to perform and interpret urodynamic evaluation in children with voiding dysfunction of varying etiologies.
4. Practice based learning and improvement: The PGY-4 resident on pediatrics should use their exposure to patients with pediatric urologic issues to focus their reading and self directed learning. The resident should be able to competently read and interpret the pediatric urologic literature and use this information in the day to day practice of pediatric urology in a variety of clinical settings including the outpatient clinics, emergency room, operating room, and in patient settings. The resident should be able to use information technology to optimize learning and participate in the education of patients, families, other health professionals and students in the area of pediatric urology.
5. Professionalism: The PGY-4 resident on pediatrics should learn to interact in a professional manner with children with urologic disease processes, other health care professionals who deal with children and parents. The resident will demonstrate compassion, integrity and respect for others and responsiveness to patient needs that supersedes self interest. The resident will show respect for patient and family privacy and autonomy and show a sensitivity and responsiveness to a diverse patient population.
6. System based practice: The PGY-4 resident on pediatrics should learn the appropriate use of medical resources in the evaluation and management of children with urologic diseases. The resident should work effectively in various health care delivery settings and systems relevant to pediatric urology. The resident should effectively coordinate care of pediatric patients within the health care system and advocate for quality patient care and optimal patient care systems. The resident should participate in identifying system errors and implementing potential systems solutions in the pediatric urology setting.

CURRICULUM GOALS AND OBJECTIVES (cont'd)

NorthShore University Health Systems Rotation:

- 1) Outpatient:
 - a. obtains complete and accurate patient histories
 - b. performs thorough and appropriate physical exam
 - c. orders and interprets appropriate laboratory and radiological tests
 - d. integrates information meaningfully and coherently
 - e. generates appropriate differential diagnosis
 - f. is able to identify and discuss pathophysiology of urologic disease processes
 - g. can intelligently discuss diagnosis, evaluation and treatment of common urologic disorders
 - h. applies knowledge to solve clinical dilemmas
 - i. understands rationale for varied approaches to clinical problem
 - j. able to perform basic urologic studies including: urine analysis, bladder scan, transrectal ultrasound and biopsy of the prostate and urodynamic studies
- 2) Inpatient:
 - a. develops appropriate evaluation and treatment plan for preoperative and postoperative patients
 - b. can discuss rationale and risks of commonly performed surgical cases
 - c. reads about surgical procedures in advance
 - d. demonstrates surgical proficiency and technical ability during endoscopic procedures such as cystoscopy, ureteroscopy and percutaneous renal surgery
 - e. demonstrates surgical proficiency and technical ability during commonly performed open surgical procedures
 - f. demonstrates surgical proficiency and technical ability during laparoscopic procedures
 - g. effectively identifies and manages postoperative clinical problems
 - h. plans outpatient follow-up visits as needed

Competency based goals and objectives for PGY-4 year- NorthShore

1. Interpersonal and communication skills: The PGY-4 resident should develop leadership skills in communicating and dealing with junior residents and medical students, as well as other health professionals in the inpatient and outpatient settings. The resident should communicate effectively with patients, families and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds. The resident should communicate effectively with physicians, other health professionals and health related agencies.
2. Medical knowledge: The PGY-4 resident should demonstrate a growing fund of knowledge concerning urologic diseases, their management and surgical procedures. The resident is expected to gain a more advanced understanding of pathophysiology of urologic diseases including infectious processes, malignancies, voiding dysfunction, urinary stone disease,

CURRICULUM GOALS AND OBJECTIVES (cont'd)

sexual dysfunction, and minimally invasive surgical procedures. Overall,

the resident should demonstrate knowledge of established and evolving biomedical, clinical and epidemiological and social-behavioral sciences, as well as the application of this knowledge to health care. The resident should gain familiarity with the day to day practice of urology in a community setting and obtain graduated surgical experience training with a diverse population of urologists.

3. Patient care: The PGY-4 resident should be able to manage complex urologic patients with a variety of problems and complications and develop appropriate treatment plans in the care of these patients. Overall, the resident should provide patient care that is compassionate, appropriate and effective to the treatment of health problems and the promotion of health. The resident should be able to perform a complete urologic history and physical examination in the emergency room, outpatient clinic or for in patient consultations and based on this information the resident should be able to order appropriate diagnostic procedures in a cost effective manner. The resident should be able to discuss the differential diagnosis of all urologic problems and develop a rationale therapeutic plan for the patient. In the operating room, the resident should be able perform open and laparoscopic nephrectomy, radical orchiectomy, all penile and scrotal surgery, endoscopic procedures involving the bladder, kidney, prostate, urethra and ureter and female incontinence and reconstruction procedures.
4. Practice based learning and improvement: The PGY-4 resident should apply his/her clinical experience to focus his/her reading and learning of urologic diseases and their management. The resident is expected to be able to locate, appraise and assimilate evidence from scientific studies related to their patients' health problems and use information technology to enhance learning. The residents should participate in the education of patients, families, students, residents and other health professionals.
5. Professionalism: The PGY-4 resident should be an example of professionalism for the junior residents and students on the urology team with regard to interaction with patients, families and other health professionals. The resident will demonstrate compassion, integrity and respect for others. The resident will be responsive to patient needs and respect patient privacy and autonomy.
6. System based practice: The PGY-4 resident should have an understanding of the proper use of medical resources and how to use these in the management of complex urologic patients. The resident should advocate for quality patient care and optimal patient care systems and work in inter-professional teams to enhance patient safety and improve patient care quality. The resident should participate in identifying system errors and implementing potential systems solutions.

CURRICULUM GOALS AND OBJECTIVES (cont'd)

Competency based goals and objectives for PGY-4 year - University of Chicago

Hospital Adult

1. **Interpersonal and communication skills:** The resident should continue to improve the ability to effectively communicate with patients, families and other health professionals. The resident should work effectively as a member or leader of a health care team or other professional group. The resident should act in a consultative role to other physicians and health professionals and maintain comprehensive, timely and legible medical records.
2. **Medical Knowledge:** The resident should demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. The resident should gain an in-depth fund of knowledge regarding both uncomplicated and complex urologic pathology. The resident should gain confidence in the performance of major urologic procedures including radical surgical procedures for urologic oncologic disease and complex reconstructive procedures. The resident should gain an understanding of the organization and construction of a didactic conference schedule with attention to provision of a comprehensive learning experience for both senior and junior level residents and students.
3. **Patient care:** The resident should be able to evaluate and manage patients with urologic diseases in a variety of settings including the emergency room, operating room, outpatient clinic and in patient consultations. In addition, the resident should be able to supervise students and junior residents in the evaluation and management of urologic patients in these settings. The resident should learn the basic surgical approaches associated with laparoscopic urologic procedures and perform vaginal and retropubic anti-incontinence procedures. The resident should be able to perform all endoscopic surgery as primary surgeon including transurethral resection of the prostate, laser photo vaporization of the prostate, transurethral resection of bladder tumors and ureteroscopy. The resident should be able to first assist in robotic radical prostatectomy and learn to perform complex reconstruction procedures such as artificial urinary sphincter placement and penile prosthesis insertion.
4. **Practice based learning and improvement:** The resident is expected to identify a case to analyze using the Vanderbilt Healthcare Matrix during the monthly morbidity and mortality conference. The resident should be able to locate, appraise and assimilate evidence from scientific studies related to their patients' health problems. The resident should use information technology to optimize learning and participate in the education of patients, families, students, residents and other health professionals.
5. **Professionalism:** The resident should be an example of professionalism for junior residents and students and exhibit compassion, integrity and respect for others. The resident should demonstrate accountability to patients, society and the profession and show sensitivity and

CURRICULUM GOALS AND OBJECTIVES (cont'd)

6. responsiveness to a diverse patient population that includes diversity in

- gender, age, culture, race, religion, disabilities and sexual orientation.
7. System based practice: The resident is expected to work effectively in various health care delivery settings and systems relevant to urology and to coordinate patient care within the health care system relevant to the field. The resident should incorporate considerations of cost awareness and risk-benefit ratio in patient and/or patient population based care as appropriate.

PGY-5 - The fourth year in Urology is spent on the adult service at the University of Chicago Hospital (9 months) and at NorthShore University Health Systems (3 months)

Goals and objectives for PGY-5 year:

At the conclusion of the PGY-5 year, the residents should demonstrate a mastery of comprehensive and complex surgical technical skills as well as medical management abilities allowing them to perform proficiently and independently. They perform as chief residents, and assume a high level of independence in inpatient surgical and medical care. The PGY-5 residents must demonstrate sufficient knowledge, problem-solving skills, and clinical judgment that enable them to teach and evaluate junior residents and medical students. The PGY-5 residents oversee the evaluation and management of all patients prior to surgery and supervise their post-operative care. Under the direct supervision of the faculty, the PGY-5 residents are responsible for total patient care on the inpatient services. It is their responsibility to supervise the more junior residents and medical students on daily clinical rounds. They are also responsible for the overall administrative organization of the urology service including operating room coverage and assignment of students and junior residents.

**Competency based goals and objectives for PGY-5 year (Chief Resident)
University of Chicago Hospitals:**

1. Interpersonal and communication skills: The chief resident should demonstrate the ability to manage the interaction and daily assignment of clinical duties to the other residents and students on the urology service. The chief resident must communicate effectively with the faculty in the evaluation and assessment of the in-patient service. The chief resident must demonstrate leadership ability in the day to day management of the other members of the urology team.
2. Medical knowledge: The chief resident should achieve a level of knowledge of urologic disease processes, their evaluation, differential diagnosis, management and treatment options in order to practice competently and independently. The resident should demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as their application to patient care. The resident should gain an in depth fund of knowledge concerning all aspects of urologic pathology. The resident should gain confidence in the performance of major urologic procedures including radical surgical procedures for urologic oncologic disease and

CURRICULUM GOALS AND OBJECTIVES (cont'd)

- complex reconstructive procedures sufficient to allow the performance of these procedures unsupervised following graduation.
3. Patient care: The chief resident should provide appropriate care to all patients on the urologic service and should demonstrate the ability to provide this care competently and independently. In the outpatient clinic the resident should perform a complete urologic history and physical examination and based on this information, the resident should be able to order appropriate diagnostic procedures in a cost effective manner and recommend therapy. In the operating room, the resident should be able to perform a robotic radical prostatectomy, radical cystectomy with both continent diversion and ileal conduit, complex reconstructive procedures such as those associated with fistula between the urinary tract and intestinal tract and/or female pelvic organs and laparoscopic and open partial and total nephrectomy.
 4. Practice based learning and improvement: The chief resident should demonstrate the ability to use his day to day interactions with patients to foster self directed learning and demonstrate the promise to carry this forward throughout his/her career in urology. The resident is expected to use information technology to optimize learning and participate in the education of patients, families, students, residents and other health professionals.
 5. Professionalism: The chief resident should demonstrate a professional attitude towards colleagues, other health professionals and students. This professionalism should be carried forward throughout his/her career. The resident will demonstrate compassion, integrity and respect for others and set an example for the junior residents and students on the urology team. The resident should demonstrate responsiveness to patient needs and respect patient privacy and autonomy.
 6. System based practice: The chief resident should have the ability to assess clinical situations and problems and devise an effective, cost efficient plan of evaluation and management. He/she should demonstrate the ability to function in a health care system and appropriately use resources and involve other health professionals in the management of patients with urologic diseases. The resident incorporate considerations of cost effectiveness and risk benefit analysis in patient care and lead to the junior residents and students to a better understanding of these issues.

Competency based goals and objectives for PGY-5 year (Chief Resident) - NorthShore University Health Systems:

1. Interpersonal and communication skills: The chief resident should demonstrate the ability to interact with other health providers in a practice setting. He/she should communicate effectively with consultants and other health professionals in the management of urologic patients as well as those patients on other services on whom he/she is asked to consult. The resident should be able to communicate effectively with patients, families and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds. The resident should be able to communicate

CURRICULUM GOALS AND OBJECTIVES (cont'd)

effectively with patients, families and other health professionals and provide leadership for the junior residents and students on the urology service.

2. Medical knowledge: The chief resident should achieve a level of knowledge of urologic diseases, their evaluation, diagnosis and management in order to practice competently and independently. The resident should gain an in depth fund of knowledge regarding both uncomplicated and complex urologic pathology. The resident should demonstrate an investigatory and analytical thinking approach to a variety of clinical situations. The resident should demonstrate knowledge and application of basic and clinically supportive sciences which are appropriate to the discipline of urology. The resident should gain confidence in the performance of major urologic procedures including radical surgical procedures for urologic oncologic disease and complex reconstructive procedures to allow the performance of these procedures unsupervised following graduation.
3. Patient care: The chief resident should provide appropriate care to all patients and should demonstrate the ability to provide this care competently and independently. The resident should provide overall patient care that is compassionate, appropriate and effective to the treatment of health problems and the promotion of health. In the outpatient clinic, emergency room and in patient consultation setting, the resident should be able to perform a complete urologic history and physical examination and based on this information, the resident should be able to order appropriate diagnostic procedures in a cost effective manner and recommend therapy. In the operating room, the resident should be able to perform radical prostatectomy, cystectomy, partial and total nephrectomy, retroperitoneal lymph node dissection, percutaneous nephrolithotomy and laparoscopic and robotic procedures.
4. Practice based learning and improvement: The chief resident should demonstrate the ability to use his day to day interactions with patients to foster self directed learning and demonstrate the promise to carry this forward throughout his/her career in urology. The resident should be able to locate, appraise and assimilate evidence from scientific studies related to the patients' health problems and use information technology to optimize learning.
5. Professionalism: The chief resident should demonstrate an appropriately professional attitude towards colleagues, patients, families and other health professionals throughout the health care system. The resident will demonstrate compassion, integrity and respect for others and respond appropriately to patients and their family needs. The resident will respect patient privacy and autonomy and be accountable to patients, peers and society. The resident will demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities and sexual orientation.
6. System based practice: The chief resident should have the ability to assess clinical situations and problems and devise an effective, cost efficient plan of evaluation and management. He/she should demonstrate

CURRICULUM GOALS AND OBJECTIVES (cont'd)

the ability to function in a health care system and appropriately use resources and involve other health professionals in the management of patients with urologic diseases. The resident should work effectively in various health care delivery settings and systems relevant to urology and to coordinate patient care within the health care system. The resident should advocate for quality patient care and optimal patient care systems.

These goals are satisfied by a dedicated rotation which includes both outpatient evaluation and treatment of male reproductive disorders in the University of Illinois Chicago fertility clinic and participating in surgical care of patients. University of Illinois Chicago Andrology faculty also give lectures and seminars in male reproductive topics at the University of Chicago Medical Center Campus.

The Goals and Objectives as they apply to each year of urology residency training:

UR-1: At the conclusion of the UR-1 year, residents should demonstrate sufficient progress in the components of clinical competence that allows them to function as integral team members. Specifically, the residents acquire the necessary skills of data gathering, medical knowledge and clinical acumen. Under the supervision of the attending staff and senior residents, the first year urology residents gain experience in cystoscopy, other endourologic procedures, and assist on more complex open urological procedures. The UR-1 residents take primary call every fourth night from home. They participate actively in weekly urologic conferences.

UR-2: The UR-2 resident build on past experiences both clinically and surgically, allowing them to develop as critical thinkers and assume a team leadership role. The residents are afforded increasing responsibilities including the primary management of inpatient consultations. The residents perform more complex endoscopic and open surgical procedures. The UR-2 residents spend six months on the adult urology service and six months at Mount Sinai Hospital. At Mount Sinai Hospital, in addition to exposure to general urology, the residents gain experience in the evaluation and management of laparoscopic endourology. They share primary call with UR-1 residents.

UR-3R: Urologic Research Year – The residents, under the supervision of dedicated faculty members, who serve as mentors, engage in relevant clinical and/or basic science research. This experience allows the UR-3R residents to perform hypothesis-driven research and to critically evaluate their own research and the research of others. They are expected to publish their findings and to present their data at regional and national meetings. They are also expected to maintain a high level of independent study and clinical investigation during their research year. Their only clinical responsibility is to spend one day per week for six months at the University of Illinois learning the basic diagnostic evaluation and management of male infertility.

CURRICULUM GOALS AND OBJECTIVES (cont'd)

UR-4: At the beginning of the UR-4 year, the residents are capable of making independent decisions based on previous clinical experiences. As they progress through the UR-4 year, the residents develop the ability to recognize and manage both the medical and surgical complexities of urologic disease, allowing them to perform at the level of a senior resident. The UR-4 urology residents spend three months on the adult urology service, three months on the pediatric urology service, and six months at NorthShore University Health Systems. On the pediatric urology service, they become proficient in the diagnosis and management of neonatal and pediatric urologic diseases.

UR-5: At the conclusion of the UR-5 year, the residents should demonstrate a mastery of comprehensive and complex surgical technical skills as well as medical management abilities allowing them to perform proficiently and independently. The UR-5 residents spend nine months on the adult urology service and three months at NorthShore University Health Systems. They perform as chief residents, and assume a high level of independence in inpatient surgical and medical care. The UR-5 residents must demonstrate sufficient knowledge, problem-solving skills, and clinical judgment that enable them to teach and evaluate junior residents. The UR-5 residents oversee the evaluation and management of all patients prior to surgery and supervise their post-operative care. Under the direct supervision of the faculty, the UR-5 residents are responsible for total patient care on the inpatient services. It is their responsibility to supervise the more junior residents and medical students on daily clinical rounds. They are also responsible for the overall administrative organization of the urology service including operating room coverage and conferences.

The Residency Program:

The University of Chicago Urology Residency is a six-year program combining one year of general surgery and five years of urology.

PGY-1 year -The first year in general surgery (PGY-1) includes rotations in areas related to urology including general surgery, pediatric surgery, plastic surgery, and transplantation. The subsequent years are spent in urology, and, during each year, residents are afforded increasing levels of independence and responsibility culminating in the chief resident (PGY-5) year.

PGY-2 year - The first year of urology residency (PGY-2) is spent on the adult urology service. During this year the residents work under the supervision of the chief residents and faculty. They are directly responsible for the care of the patients on the urology service and are specifically responsible for their evaluation, preparation for surgery and post-operative care.

On the adult service, the PGY-2 residents participate actively in the outpatient clinic, and, under the supervision of the faculty, learn and participate in basic endoscopic and open surgical procedures. In the clinic, PGY-2 residents are expected to gain proficiency in cystoscopy, urodynamics, and transrectal ultrasonography. In endourology, the PGY-2 residents begin to learn ureteroscopic and percutaneous techniques for the management of upper urinary tract calculi. Open surgical

CURRICULUM GOALS AND OBJECTIVES (cont'd)

procedures include inguinal and scrotal surgery. In addition, the PGY-2 residents also participate actively in the more complicated open surgical procedures. For example, the PGY-2 residents may open and close the flank for a nephrectomy, perform the pelvic lymphadenectomy prior to a radical prostatectomy, and perform the bowel anastomosis for urinary tract reconstruction following cystectomy.

The PGY-2 residents also participate actively in our weekly urologic conferences. The PGY-2 and PGY-3 residents share first call every fourth night for problems relating to inpatients and for urologic problems that arise in the Emergency Room. At all times, the PGY-2 residents are supported by the senior residents and by the faculty member on call. PGY-2 residents also participate in the education of third and fourth year medical students rotating through the urology service.

PGY-3 year – The second year of urology residency (PGY-3) is spent six months on the adult urology service and six months at Mount Sinai Hospital, a major Chicago trauma center. During this year, PGY-3 residents are expected to improve their endourologic skills and to become proficient in both flexible and rigid ureteroscopy. They also are introduced to minimally invasive surgery, and they begin to learn basic laparoscopic skills. PGY-3 residents also are expected to become proficient in open surgical procedures including inguinal and genital surgery, simple nephrectomy, and pelvic lymphadenectomy. The two PGY-3 residents are on call every fourth night and actively participate in our weekly urologic conferences.

There is one full-time attending urologist at Mount Sinai Hospital, Dr. Doreen Chung, who completed her residency at the University of Toronto and her fellowship in voiding dysfunction, incontinence, and female urology at Weill Cornell Medical College and Memorial Sloan-Kettering Cancer Center.

Our PGY-3 residents work closely with Dr. Chung, learning the principles and surgical techniques involved in the management of laparoscopic endourologic surgery. Mount Sinai Hospital also sees a large number of patients with general urologic problems including benign prostatic hyperplasia (BPH) and urinary incontinence.

PGY-3R year - The PGY-3R year is devoted almost entirely to research. The urology research laboratories are located immediately adjacent to and opposite from the urology administrative offices and have undergone a major renovation and expansion. These laboratories are fully equipped to allow sophisticated research in a wide arena of activities. During the PGY-3R year, urology residents are encouraged to complete independent research projects under the supervision of the urology faculty. Dr. Carrie Rinker-Schaeffer is the Director of Urologic Research. She is a biochemist with post-doctoral training in molecular biology, and her major research interest is the identification of genes which regulate prostate cancer metastasis. Dr. Walter Stadler is a medical oncologist with a joint appointment in urology, and he has a dedicated research interest investigating the molecular biology of bladder cancer. Dr. Arieh Shalhav has established an active animal laboratory in which all residents receive training in minimally invasive surgical techniques. There are also several interesting research projects underway, including a newly developed animal model to study the

CURRICULUM GOALS AND OBJECTIVES (cont'd)

effect of warm ischemia on the kidney. Dr. Glenn Gerber, who is Director of Endourology and has great expertise in kidney stone disease, has developed an animal model to study intestinal hyperoxaluria.

In addition to basic and clinical research, residents are encouraged to work with any and all of the urology faculty on clinical projects. All of our prostate cancer patients are in a database, and analysis of this database has already yielded several interesting publications. We anticipate having all of our adult and pediatric patients in databases which will greatly facilitate clinical publications.

Residents are permitted and encouraged to spend their research year in another laboratory at The University of Chicago Medical Center, provided they receive appropriate mentoring and support. The PGY-3R laboratory year is considered an integral part of the urology residency, and philanthropic funds have been provided by grateful patients to support not only our laboratory renovations but also resident research, education, and travel. Our residents are encouraged and expected to publish their research findings and to present their work at regional and national meetings.

During the PGY-3R year, residents also receive clinical training in infertility. The two PGY-3R residents each spend one day per month for six months with Drs. Lawrence Ross and Craig Niederberger at the University of Illinois learning the diagnostic evaluation and treatment of male infertility. At the University of Illinois our residents are observers only.

PGY-4 year – The PGY-4 year includes three separate rotations, six months on the pediatric urology service, three months on the adult urology service, and three months at NorthShore University Health Systems. On the pediatric urology service, the PGY-4 residents receive intense experience in the major reconstructive surgical techniques emphasized in pediatric urology. At the completion of the pediatric urology rotation, the PGY-4 residents should be proficient in the evaluation and management of pediatric urology patients and should be able to perform fundamental procedures such as pediatric endoscopy, pyeloplasty, ureteroneocystostomy, and anterior hypospadias repair. Many of these surgical procedures are performed using magnification and microsurgical instruments, and, therefore, residents receive considerable experience in microsurgical technique during the pediatric urology rotation.

PGY-5 year - The PGY-5 year is spent as chief resident and divided between 9 months on the adult urology service at the University of Chicago Medical Center and three months at NorthShore University Health Systems. During this year, the PGY-5 residents are responsible for the day to day operation of the urology service and the management of patients on the service. The chief residents are expected to direct the junior residents regarding problems arising on the ward, clinic or in the emergency room. The chief residents are responsible for the administrative organization of the service in terms of operating room and conferences. The chief residents perform the most difficult operative procedures under the supervision of the faculty. Typical chief resident cases include radical prostatectomy, cystectomy, orthotopic bladder reconstruction, complex female and pelvic reconstructive procedures, and advanced minimally invasive procedures including robotic-assisted radical prostatectomy.

The chief residents oversee the evaluation and management of urology patients prior to surgery and supervise their post-operative care. The chief residents are responsible for **CURRICULUM GOALS AND OBJECTIVES (cont'd)**

informing the faculty about all problems arising on the urology service. By the end of the PGY-5 year, chief residents are expected to be competent in all aspects of adult and pediatric urology, including open and endourologic procedures.

An important additional responsibility of the chief residents is education. The PGY-5 residents are responsible for instructing junior residents in various aspects of patient care and help to teach them surgical technique. They are also responsible for ward teaching of the medical students assigned to the urology service and for assigning responsibility according to their ability. The medical students rotating through urology evaluate the chief residents, and the urology service usually ranks very highly in these evaluations. The chief residents are responsible for organizing urology case conferences and morbidity and mortality conferences. Finally, the chief residents may complete research initiated during the laboratory year and are expected to complete all research projects prior to finishing residency training.

Under the direct supervision of the faculty, responsibility for total patient care on the inpatient service rests with the chief residents on the service. The chief resident assigns the junior residents responsibility, and the attending physician responsible for the patient, in turn, supervises the chief resident. For inpatients, the junior resident admits the patient, performs the initial history and physical examination, and then discusses with the chief resident subsequent evaluation and management, if this has not been previously determined as an outpatient. The attending urologists work closely with the resident staff to determine optimal therapy and management of complications. Each of the attending faculty makes rounds daily and sees his patients usually with the residents, and it is the chief residents' responsibility to make sure that each faculty member is aware of the progress of each patient. If problems occur, the chief residents discuss this with the faculty member, and a decision is made regarding management. Whenever possible, the attendings round with the residents, but this is sometimes not possible because residents may be occupied elsewhere when a particular attending wishes to make rounds.

RESIDENT ELIGIBILITY, SELECTION, PROMOTION, AND DISMISSAL

Eligibility - To apply for a urology training program position here at the UCMC, applicants must have one of the following qualifications:

- graduate of United States or Canadian medical school accredited by the Liaison Committee on Medical Education (LCME)
- graduate of United States osteopathic medicine college accredited by the American Osteopathic Association
- graduate of medical school located outside the United States or Canada and have one of the following:
 - current valid certificate from the Educational Commission for Foreign Medical Graduates prior to appointment.
 - full and unrestricted license to practice medicine in the State of Illinois
 - graduate of medical school outside the United States who has completed a Fifth Pathway program provided by an LCME accredited medical school.

Enrollment of Noneligibles - A training program's ACGME accreditation may be withdrawn if an applicant is enrolled who does not meet the above criteria.

Nondiscrimination - The Medical Center and the individual programs shall not discriminate against any person in the selection or promotion process because of race, color, religion, sex, national origin, age, marital status, disability or veteran status.

Selection - Applicants are chosen according to criteria established by the individual programs.

These criteria include, but are not limited to:

- Preparedness
- Ability
- Aptitude
- Academic Credentials
- Communication Skills
- Personal Qualities such as motivation and integrity

Method of Selection

- Selected applicants are interviewed by the training program director and/or chairman of the department as designated by each department.
- Applicants are interviewed by faculty members and other program representative as designated by the training program written criteria.
- Evaluation of applicant interviews and credentials are reviewed by the program's selection committee.
- Selection of each applicant is based on the criteria listed in this policy.

Program directors may send applications for training programs to candidates at their discretion, as long as ACGME requirements, federal, and state nondiscrimination and equal opportunity laws, orders, and regulations are met.

RESIDENT ELIGIBILITY, SELECTION, PROMOTION, AND DISMISSAL (cont'd)

Promotion - The decision whether to promote a resident is the responsibility of the residency director with the advice of the faculty of the program. Each program will develop written criteria for promotion based on the specialty and subspecialty requirements of the ACGME.

The method of evaluation shall consist of direct observation of the resident as well as by indirect observation through rotation, evaluations, correspondence between programs and written examination (National Board, Inservice Exams). It is expected that residents will participate in all aspects of the curriculum, as well as in the periodic evaluation of educational experiences with teachers. It is further expected that residents will complete all administrative responsibilities of a resident. All contract renewals are subject to review by the Hospitals to insure that the resident is in full compliance with all applicable Hospitals' policies, rules and regulations.

Residency Training Program Director - Nothing in this policy limits the training program directors' choices in selecting candidates when ACGME requirements, federal, and state nondiscrimination and equal opportunity laws, orders, and regulations are met.

Nothing in this policy limits the training directors' policies for promotion when ACGME requirements, federal, and state nondiscrimination and equal opportunity laws, orders, and regulations are met.

Dismissal

A. Grounds for Dismissal

Any Housestaff member who fails to comply with the terms of his/her contract, including, without limitation:

- failure to fulfill the educational and clinical requirements of the graduate medical education and clinical training program to the satisfaction of the Program Director;
- failure to acquire at least the same professional knowledge, skill and judgment that residents in the relevant department normally acquire at the same level of post graduate medical education training, or;
- failure to carry out satisfactorily his/her professional responsibilities,
- failure to maintain a current professional license, or;
- failure of Housestaff members who are not U.S. citizens to maintain a current visa, or;
- Housestaff member is, or becomes, ineligible to participate in the Medicare Medicaid or other governmental payment program.

B. Recourse

Any Housestaff member who is dismissed during the course of a one-year appointment may have the matter reviewed via the established grievance procedure. (See Housestaff Handbook for Grievance Policy)

CALL SCHEDULE

The two PGY-2 and the two PGY-3 residents share first call every fourth night. First call is usually taken from home, but it may be necessary to take call in the hospital depending on the number and complexity of hospitalized patients. A private, unshared, call room is available for the urology residents. The first call resident reports directly to a more senior resident regarding in-patients or emergency room consultations. The two chief residents (PGY-5) share second call every other night. On weekends, second call is shared between the PGY-4 and PGY-5 residents with two weekends on call every four weeks. On weekends, either a PGY-4 or a PGY-5 resident rounds with the PGY-2 or PGY-3 resident on call on all of the inpatients on the adult and pediatric urology services. The PGY-4 and PGY-5 residents do not normally take call in the hospital except during surgical emergencies.

The Program Director is responsible for the assignment of reasonable duty hours, and each resident is allowed at least one full day out of seven away from the hospital and free of medical responsibilities. The Urology Residency Duty Policy which follows is provided to all residents, faculty, and staff annually. The policy requires compliance by all parties and is strictly adhered to.

OFF-DUTY ACTIVITIES

Off-Duty Activities – As a clinical urology resident with either a temporary Illinois license, or any type of visa, is not permitted to undertake patient care activities outside the program ("Moonlighting"). Other residents (research) may undertake any patient care activity outside the program, either at The University of Chicago Medical Center or elsewhere, only with prior written approval by the Program Director. Resident performance will be monitored by the Program Director for the effect of these activities upon performance and that adverse effects may lead to withdrawal of permission. Following withdrawal, the urology resident shall promptly discontinue moonlighting. The University of Chicago Medical Center (UCMC) does not require any housestaff member to engage in moonlighting whether or not the housestaff member is given any additional remuneration. All residents engaged in moonlighting must be licensed for unsupervised medical practice in the state where the moonlighting occurs. In the event that approval is given for a housestaff member to engage in any clinical practice outside of the program at another institution, UCMC accepts no responsibility for such practice and provides no liability coverage under the self-insurance trust unless otherwise expressly agreed to in writing; the housestaff member is exclusively responsible for all liabilities arising out of such outside practice.

This policy shall not preclude housestaff members from providing services in addition to program requirements, which are related to or incidental to the program, upon the request of, or with the consent of, the Program Director. The Program Director shall be responsible for establishing duty hours (including extra duty hours) under the program for housestaff members.

In general, housestaff members may not bill professional fees.

**University of Chicago Medical Center
Urology Residency Training Program**

Duty Hours Policy

Purpose

- (1) To ensure knowledge and routine compliance with ACGME Common Program Requirements relating to duty hours, moonlighting, fatigue awareness and mitigation;
- (2) To describe the program's process for reporting by residents/fellows of duty hours and monitoring by program leadership;
- (3) To describe the program's process for educating residents/fellows and faculty about fatigue awareness and mitigation.

Policy

Duty Hour Requirements

Duty hours are defined as all clinical and academic activities related to the program, i.e., patient care (inpatient and outpatient), administrative duties related to patient care, the provision for transfer of patient care, time spent in-house during call activities and scheduled academic activities such as conferences.

Duty hours do *not* include reading and preparation time spent away from the duty site. Averaging must occur by rotation – 4 week period, 1 month period, or the period of a rotation if less than 4 weeks.

Vacation and leave will be excluded when calculating duty hours, call frequency or days off.

Maximum Hours of Work per Week – 80 hour requirement

Duty hours are limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities and moonlighting. Moonlighting hours must be reported and counted when monitoring compliance with the 80 hours per week standard.

Mandatory Time Free of Duty – 1 day-in-7 off requirement

Residents will be scheduled for a minimum of 1 day free of duty every week (when averaged over a 4-week period or as otherwise determined by the rotation schedule displayed on a block diagram). At-home call will not be assigned on these free days. One day is defined as one continuous 24-hour period free from all clinical, educational and administrative activities.

Maximum Duty Period Length requirement

PGY 1 residents will not work more than a 16 hour continuous duty shift, must not take at home call, and must not moonlight.

Duty Hours Policy (cont'd)

PGY 2 and above are subject to a 24 hour maximum scheduled block of duty time. An additional 4 hours for transitions of care may occur but will not be scheduled. No additional clinical responsibilities after 24 hours of continuous in-house duty will be undertaken.

In unusual circumstances, residents, on their own initiative, may remain beyond their scheduled period of duty to continue to provide care to a single patient. Justifications for such extensions of duty are limited to reasons of required continuity for a severely ill or unstable patient, academic importance of the events transpiring, or humanistic attention to the needs of a patient or family.

Under those circumstances a handover for management of the care of all other patients to the team responsible for their continuing care will occur. In addition, for every event in which this provision is employed, a document will be prepared and provided to the Program Director explaining the reason(s) for remaining to care for the patient in question.

The program director will review each submission of additional service, and track both individual and program-wide episodes of additional duty.

In all circumstances an individual may not exceed 28 consecutive hours of duty (24+4).

Minimum Time off Between Scheduled Duty Periods requirement

Residents should have 10 hours and will be provided 8 hours free of duty between scheduled duty periods.

Intermediate-level residents (as defined by the Review Committee) must have at least 14 hours free of duty after 24 hours of in-house duty.

Residents may need to stay on duty to care for their patients or return to duty less than 8 hours in preparation of entering unsupervised practice of medicine and care for patients over irregular or extended periods. These instances will be monitored by the program director and there will be full compliance with the 80 hour, 1-in-7 off, and maximum duty period length requirements.

On-Call Activities

The objective of on-call activities is to provide residents with continuity of patient care experiences throughout a 24-hour period. In-house call is defined as those duty hours beyond the normal work day when residents are required to be immediately available in the assigned institution.

Maximum Frequency of In-House Night Float: Residents will not be scheduled for more than six consecutive nights of night float.

Maximum In-House On-Call Frequency: In-house call will not be scheduled more frequently than every-third-night (when averaged over a four-week period).

Duty Hours Policy (cont'd)

At-Home Call: At-home call (pager call) is defined as call taken from outside the assigned institution. Time spent in the hospital by residents on at-home call must be counted towards the 80-hour maximum weekly hour limit.

The frequency of at-home call is not subject to the every third night limitation but must satisfy the requirement for one-day-in-seven free of duty, when averaged over four weeks. At-home call must not be as frequent or taxing as to preclude rest or reasonable personal time.

Blanket approval is provided to return to the hospital while on at-home call to care for new or established patients. Each episode of this type of care, while it must be included in the 80-hour weekly maximum, will not initiate a new "off-duty period".

Fatigue Mitigation

The program will provide education for residents to recognize the signs of fatigue and sleep deprivation. Further, the program will provide education in alertness management and fatigue mitigation processes. The program will adopt and apply policies to prevent and counteract the potential negative effects on patient care and learning such as back-up call schedules and naps.

All residents will complete the online educational fatigue and sleep deprivation module prior to or shortly following matriculation. Faculty will complete the online module at least once over the course of the accreditation cycle.

The program may utilize additional resources to provide education. Documentation, including date, content, delivery method and attendance for these activities, will be preserved.

Strategic napping, especially after 16 hours of continuous duty and between 10:00 pm and 8:00 AM, is strongly suggested.

Duty Hours Reporting and Monitoring Processes

As of **July 1, 2012** we are switching to universal duty types that will include the list below. All of the listed items will be in each program. **Duty Type Listing:**

- **Standard Rotation** (include inpatient, outpatient, continuity clinic etc.)(up to 24 hours After 24th hour, resident/fellow is required to submit reason)
- **Call from Home** (Any time a resident or fellows is on pager call at home)
- **Moonlighting ESP**(any and all extra service payment duties)
- **Back in for a Case**(anytime a resident or fellow is prompted to come back to the hospital because of a home call issue)

The above duty type listing will accommodate every ACGME accredited program and will eliminate the erroneous duty hour logging and system check errors.

Policy for Supervision of Residents

Although urology residents are afforded increasing responsibility during their training, all residents adhere strictly to a formal chain of command. Junior residents report directly to their senior residents and chief residents, who are responsible for the operation of the adult and pediatric urology services at the University of Chicago Hospitals and the adult service at Mount Sinai Hospital. The most senior residents (PGY-5 and PGY-6) are responsible for communicating all important information to the responsible attendings. There is a urology attending on call each week at each institution on a rotating basis that is ultimately responsible for unassigned consults and emergency operations. Since all of the urology residents and faculty are well known to one another, there is rarely any question about whom to contact. Ultimately, however, it is the responsibility of the senior and chief residents at both The University of Chicago Hospitals and Mount Sinai to relay all information to the appropriate urology faculty attendings and to contact the faculty member on call in case of an emergency.

Policy Regarding Faculty Supervision of Residents

- 1) All clinical resident activity is to be supervised by a faculty member; inclusive of outpatient inpatient and operative encounters.
- 2) Each faculty member is responsible for the clinical management of his own patients and the supervision of resident coverage provided for these patients.
- 3) The faculty member on-call will be available on pager for all clinical issues.
- 4) Graded responsibility is to be encouraged based on each resident's knowledge, problem solving skills, manual dexterity, experience, and the severity and complexity of each patient status.
- 5) Encourage scholarly activity e.g. research, presenting at local and national meetings, publishing active work.
- 6) All faculty members are expected to attend Urology Grand Rounds weekly.
- 7) Campbell's conference is to be attended and supervised by the urology attending on call for that week.
- 8) Evaluation and feedback of resident performance should be provided regularly.
Formal written evaluations are to be completed twice yearly.

CURRENT BLOCK DIAGRAM OF THE UROLOGY RESIDENCY PROGRAM:

URO-1	J	A	S	O	N	D	J	F	M	A	M	J
A	Adult-X	Adult-X	Adult-X	Adult-X	Adult-Y	Adult-Y	Adult-Y	Adult-Y	NS	NS	NS	NS
B	Adult-Y	Adult-Y	Adult-Y	Adult-Y	NS	NS	NS	NS	Adult-X	Adult-X	Adult-X	Adult-X
C	NS	NS	NS	NS	Adult-X	Adult-X	Adult-X	Adult-X	Adult-Y	Adult-Y	Adult-Y	Adult-Y
URO-2	J	A	S	O	N	D	J	F	M	A	M	J
A	Peds	Peds	Adult-X	Adult-X	Sinai	Sinai	Sinai	Sinai	Peds	Peds	Adult-X	Adult-X
B	Sinai	Sinai	Sinai	Sinai	Peds	Peds	Adult-X	Adult-X	Adult-X	Adult-X	Peds	Peds
C	Adult-X	Adult-X	Peds	Peds	Adult-X	Adult-X	Peds	Peds	Sinai	Sinai	Sinai	Sinai
URO-3	J	A	S	O	N	D	J	F	M	A	M	J
A	Peds	Peds	Peds	Peds	Adult-X	Adult-X	Adult-X	Adult-X	Adult-Y	Adult-Y	Adult-Y	Adult-Y
B	Adult-X	Adult-X	Adult-X	Adult-X	Peds	Peds	Peds	Peds	Adult-X	Adult-X	Adult-X	Adult-X
C	Adult-Y	Peds	Peds	Peds	Peds							
URO-4	J	A	S	O	N	D	J	F	M	A	M	J
A	Adult-X	Adult-X	Adult-X	Adult-X	NS	NS	NS	NS	Adult-Y	Adult-Y	Adult-Y	Adult-Y
B	Adult-Y	Adult-Y	Adult-Y	Adult-Y	Adult-X	Adult-X	Adult-X	Adult-X	NS	NS	NS	NS
C	NS	NS	NS	NS	Adult-Y	Adult-Y	Adult-Y	Adult-Y	Adult-X	Adult-X	Adult-X	Adult-X

Non-accredited Year (URO-3R)

The PGY-3R year is spent in research and specifically, they do not take call.

Adult X – Adult Service UofC #1

Adult Y – Adult Service UofC #2

NS – North Shore

Sinai – Mount Sinai

UROLOGY CONFERENCE AND LECTURE SERIES

The entire Section of Urology meets for weekly conferences from 6:45-8:15 a.m. each Wednesday at The University of Chicago Medical Center Main Campus. During this time period the following individual conferences are held:

Grand Rounds – (twice per month) - This conference is held twice a month and is organized by Dr. Glenn Gerber. Grand Rounds is presented by outside speakers (from other urological programs in the area or other departments within The University of Chicago Medical Center) approximately 6-8 times per year. Dr. Rinker-Schaeffer or another member of the basic science laboratory presents basic science topics approximately every other month.

Case Conference (twice per month) - The residents organize this conference and two to three cases are presented during one hour. A short history is given by one resident and another resident who is unfamiliar with the case is asked to request additional information and to review any available x-rays. This conference is designed to simulate the oral board examination and to give the residents experience presenting cases in an organized manner, as well as to think through an efficient approach to the management of clinical problems. The faculty provide further insight into each case through the discussion that follows each case presentation.

Uropathology Conference (once every other month) - This conference is included as part of the Grand Rounds schedule. This conference is conducted by a faculty pathologist with expertise in urologic pathology, and each conference is organized around a particular subject or organ system.

Uroradiology Conference (once every month) – This conference is also included as part of the Grand Rounds schedule. Every other month, the conference is devoted to either adult or pediatric uroradiology, and the conferences are conducted by faculty radiologists. As with uropathology conference, each uroradiology conference is organized around a particular subject or organ system.

Morbidity and Mortality/Quality Assurance Conference (once per month) - This conference is organized by the chief residents who present all complications during the preceding month. This is done for the adult and pediatric service at The University of Chicago Medical Center. All cases are presented and organized by the residents. Quality assurance issues are also discussed.

Joint Urology/Nephrology Stone Conference (once per month) - This conference includes faculty from the Sections of Urology and Nephrology. Cases are presented that highlight challenging clinical issues in the surgical and metabolic management of patients with kidney stones.

Journal Club (once per month) - At this conference, key articles from the urologic and general medical literature are reviewed by the faculty and residents. The chief residents select about ten articles with guidance from the faculty. Residents are responsible for reading all of the selected articles, which are generally chosen from the Journal of Urology and Urology. However, articles of special interest are often chosen from other journals. Each resident presents one or two articles for review at Journal Club and other residents and faculty then provide additional discussion of each article.

UROLOGY CONFERENCE AND LECTURE SERIES (continued)

Harry Schoenberg Contest (once per year) - This annual two-hour conference is named in honor of the former Chief of the Section of Urology. Each resident makes a 10-15 minute presentation concerning the most significant clinical or basic research project that they have been involved with during the preceding year. Each resident is required to participate. A plaque with the winner's name is kept in the administrative offices of the Section.

Visiting Professor (twice per year) - This conference is held in the spring and fall during which a prominent urologist from another institution is invited to visit the University of Chicago. This all day conference includes cases appropriate to the visitor's area of expertise presented by the residents for discussion and review. In addition, the visiting professor generally gives one or two lectures involving his or her work. Finally, the visiting professor goes to lunch or dinner with the residents to discuss a variety of professional issues in a more relaxed setting.

The following three weekly conferences are held at other times during the week:

Campbell's Review (once per week) - This conference is held for 90 minutes on a weekly basis from 6:00-7:30 PM. The conference is led by the chief residents and is based on a chapter from Campbell's Urology supplemented by appropriate AUA updates. Each resident is responsible for reading the chapter and related material. One faculty member attends each week and provides additional discussion and insight regarding the topic.

Urology Research Conference (once per week) - This conference is mandatory for all laboratory personnel including the two urology residents in the laboratory. Progress and problems are reviewed and the various researchers, including the two urology residents rotating through the laboratory make individual presentations. Interesting articles from the basic science journals are also reviewed.

Urologic Oncology Conference (once per week) - This conference is held weekly and is attended by urology faculty and residents, along with members of the Section of Hematology/Oncology (Dr. Stadler and Fellows) and the Departments of Radiology, Radiation Oncology (Dr. Stanley Liauw) and Pathology (Drs. Jerome Taxy and Gladell Paner). All problematic urologic oncology cases are reviewed and recommendations are made regarding patient management. The Urology residents generally present cases.

OUTPATIENT EXPERIENCE

All urology outpatients are seen in clinics at The University of Chicago Medical Center. At the medical center, the adult outpatient clinic is located on the second floor of the Duchossois Center for Advanced Medicine, which opened in 1996. The Urology Clinic is a 5,000 square foot facility, which is subdivided into two mirror-image units, allowing two urologists to see patients simultaneously. Each half of the clinic has its own registration desk and waiting room, physician's office, four examining rooms, and cystoscopy suite. The clinic also contains a laboratory, transrectal ultrasonography suite where all prostatic needle biopsies are performed, and a urodynamics suite where all urodynamic studies are performed.

Pediatric urology patients are seen in the Comer Children's Hospital outpatient pediatric specialty clinics. Pediatric medicine and surgical specialists share these clinics, and our pediatric urologist sees patients in this clinic every Monday and Friday.

Patients requiring extracorporeal shock wave lithotripsy (ESWL) are treated as outpatients twice per month in the outpatient operating rooms at The University of Chicago Medical Center using a mobile lithotripter. Dr. Glenn Gerber treats most of these patients, and he makes sure that all residents become qualified in ESWL by performing an appropriate number of cases.

RESEARCH

The Section of Urology has a demonstrated commitment to conducting basic and translational research, which advances the understanding and treatment of urologic disease. In doing so, we are sustaining the legacy of Dr. Charles Huggins, the first Professor and Chief of Urology at The University of Chicago Medical Center, who was awarded the Nobel Prize in Medicine in 1966 for the discovery of hormonal therapy in the treatment of advanced prostate cancer. We work diligently to foster creativity and innovation, as well as the most rigorous science in our investigations of urologic cancers, mechanisms of cancer metastasis, bladder physiology, stone disease, and improved surgical methods.

Dedicated Research Year (PGY-3R)

Our residency program is structured with the philosophy that all residents should receive experience in hypothesis-based research. Consequently, the PGY-3R year is devoted almost entirely to investigation, and the residents spend the year in a mentored research environment. Working with Drs. Carrie Rinker-Schaeffer and Donald Vander Griend, residents identify an appropriate research project(s) and develop a training plan for their research year. This enables the resident to initiate, design, and complete research projects to answer these questions.

During their laboratory year, our residents may also choose to work with one of our urology faculty members, or they may choose to work in another department provided they receive appropriate mentoring and support. Established research areas in the Section of Urology include:

- Identification of signaling pathways and cancer-microenvironment interactions that regulate metastasis formation (Carrie Rinker-Schaeffer, Ph.D.)
- Understanding of the function of prostate stem cells and their role in the development of prostate diseases (Don Vander Griend, Ph.D.)
- Identifying mechanisms that regulate prostate cancer metastatic colonization (Russell Szmulewitz, M.D.)
- Development of methods for the early detection and control of renal cell cancers (Scott Eggener, M.D.)
- Investigating cell signaling pathways underlying bladder cancer development (Gary Steinberg, M.D., F.A.C.S.)
- Minimally-invasive animal laboratory research (Arieh Shalhav, M.D.)
- Nephrolithiasis animal research (Glenn Gerber, M.D.)
- Bladder physiology research (Gregory Bales, M.D.)

Once the projects are underway, the residents design, implement, and critically assess their experiments on a daily basis. They meet with their faculty mentor as often as necessary and no less than once weekly. They also meet routinely with the Director of Research. As part of their training, residents also actively participate in weekly laboratory meetings and seminars, at which time the residents give and receive feedback via their interactions with scientists and clinicians involved in our research program.

RESEARCH (cont'd)

The residents are required to maintain accurate and precise experimental records, which are routinely reviewed by their faculty research advisor.

In general, the PGY-3R residents are provided a structured training environment in which they learn to conduct scientific research. These skills are fostered by working in an active research laboratory that is home to a variety of graduate students, post-doctoral fellows and senior researchers. In summary, the PGY-3R year provides a unique opportunity for our residents to develop a genuine understanding of scientific methodology and the execution of independent research.

Ongoing Clinical Research

In addition to basic and animal research, residents are encouraged to interact with other urology faculty members and participate in clinical research projects that result in publications. The Section has extensive clinical databases in prostate, bladder and kidney cancers, which facilitate hypothesis-driven clinical studies. The Section of Urology is also involved in a number of large clinical trials under the direction of Dr. Gary Steinberg, Director of Urologic Oncology. Residents also have the opportunity to become involved in many of these interesting projects. These projects would then be built into the training plan developed by each individual resident.

Residents at all levels of training are encouraged to pursue clinical research projects and write chapters and review articles. With the assistance and guidance of our faculty, residents are taught to design and implement hypothesis-driven clinical studies and to then critically assess and report the results. The residents are encouraged to involve themselves in at least 1-2 projects per academic year. At the end of each academic year, residents present their annual research during a departmental conference where the best projects are awarded prizes.

Facilities

Adjacent to the Section of Urology offices are the Gleacher Urologic Research Laboratories. These state-of-the-art facilities comprise 2500ft² of space which are fully equipped for molecular biology, biochemistry, genetics, and cellular biology research and include facilities for tissue culture, small animal research and surgery, and immunohistochemical and *in situ* hybridization facilities. Core resources including flow cytometry, antibody production, and sequencing are readily accessible and available through The University of Chicago Cancer Center.

Open, minimally-invasive and nephrolithiasis research is performed in The University of Chicago Medical Center animal research facilities. These facilities offer operating rooms that include a Da Vinci robot, large animal housing, a clinical laboratory, and pathologic services. The residency program encourages the use of the facilities not only for research but also for the development of resident operative skills.

Once again, residents are encouraged to collaborate with investigators from other departments throughout the University of Chicago Medical Center, provided that our residents receive adequate mentorship and support and perform quality, hypothesis-based research related to a urologic topic.