# TULANE UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF UROLOGY



# Competency-Based Goals and Objectives For year URO- I - URO V of Training at each Site: Lines of Progressive Responsibility

Starting July 1, 2019, the PGY-1 interns will be incorporated into the respective urology departments around the country. At Tulane, we will be using the 2019-2020 academic year as a transition year, where the PGY-1 residents will be based out of general surgery but will rotate to the urology service for an entire 12-month period [four months each].

These residents will be located at the VA and other service points, including UMC, Tulane, Lakeside, and Touro.

#### **Rotation overview:**

The first year PGY-1 urology residents will assume responsibility in clinic and ward duties, similar to firstyear general surgery residents. Duties will be appropriate for the level of training and assigned to ensure smooth and safe patient care and personal growth, and the maturation of the individual resident into a competent urologist.

The PGY-1 resident, while on the urology service, is expected to attend all conferences, as designated in the Urology department's monthly calendar.

1. **Knowledgebase:** The intern will focus on the acquisition of basic medical knowledge related to the practice of urology. Because the residents continuing onto urological training have some unique needs and areas of emphasis that is provided to them in their first year of training [such as nephrology, trauma, uro-radiology, etc], the residents should use this opportunity to rotate through these non-urology services.

They are expected to attend conferences and lectures related to specialties while on outside rotations.

2. Clinical skills: The major goal of the intern year is to become proficient in obtaining patient information, as well as an adequate urologic and general history, and then organizing that information and presenting it to team members. This organization will be required in the outpatient clinic setting, as well as in the inpatient and emergency department settings. The PGY-1 intern will not make independent decisions without the consultation of the senior urology team members, or with the faculty responsible for the particular patient or event.

Additional goals include developing a differential diagnosis for basic urologic conditions. The intern should also start the process of becoming credentialed for basic urologic procedures.

The procedures in which they would be required to be facile by the end of the PGY-1 year would include simple and complex urethral catheterizations, and knowledge of the parts and pieces of the flexible and rigid cystoscope, the flexible and rigid ureteroscope, and the rigid and flexible nephroscopes. They should

also be able to assist and learn the techniques of rigid and flexible cystoscopy, as well as rigid and flexible ureteroscopy.

Additionally, they should be able to assist in common procedures, such as:

- Incision and draining of small abscesses of the scrotum
- Taking care and replacement of the suprapubic cystostomy catheters
- Care and removal of nephrostomy tubes under senior supervision
- Be an assistant to vasectomy and other procedures, as directed by the chief resident or faculty

Basic surgical skills, such as knot tying, suturing, and using pertinent surgical instruments will be required.

All cases related to urology should be logged in. These include both cases performed by the PGY-1, or as an assistant.

3. Rotations: Each intern for the calendar year 2019-2020 will spend four months in urology and eight months outside of the Urology Dept. The non-urological rotations will include surgical intensive care, general surgery, trauma, pediatric surgery, transplant service, and any other rotation, as dictated by the General Surgery Department.

Starting the academic year 2020-2021, the residents will be based out of the Tulane Urology Department and will be assigned to the general surgery service for six months each. The institutions covered during urology will be all of those listed in the RRC rotation schedule.

During the Urology rotation, the PGY-1 resident is expected to round with the team and see patients and consults with other senior residents. The PGY-1 resident cannot individually see the in-patient and emergency consults. Consultations in the OR will also have to be conducted with a senior resident. One major goal of the PGY-1 rotation in urology is to be proficient in assessing and discussing urology patients on the consultation service. A second is to be comfortable with the instrumentation required and the basic urologic procedures. During the Urology months, the intern will also be present and learning in the general urology clinics.

4. Evaluations: The PGY-1 will meet with the urology program director at the end of the year to evaluate their experience. The PGY-1 will also, individually, be part of the quarterly or semi-annual evaluation of the residents, as per departmental policy.

Three weeks (15 days) of vacation time will be allowed during the PGY-1 year.

One week during the urology service, and then two weeks during the eight months of general surgery blocs. Please refer to the Urology departmental policy on resident rotation and other policies.

The patient-care focused expectations at the end of PGY-1 are:

- Develop an organized history taking as it relates to present history, family history, co-morbidities, and metabolic disorders
- Learn to develop differential diagnosis and management for common urological conditions, such as hematuria, prostate cancer screening, elevated PSA, UTI, LUTS, chronic pelvic pain, active surveillance of prostate cancer, and erectile dysfunction.
- PGY-1s are expected to take the urology In-Service examinations held in November of each year.

PGY-1s are expected to be facile with EMRs at all hospitals and points of service.

## URO-II Level

During the first year of training (URO-II) resident site rotations are:

- 1. Tulane University Hospital and Clinic TUH&C (*site #1*)
- 2. Southeast Louisiana Veterans Health Care System VANO (*site #7*)

#### 1. Patient Care

URO-II level is responsible for routine histories and physical examination, as well as conducting basic ward work on the clinic and private patients. All of the patients seen by the URO-II resident during the first year, in the emergency department, the admit room, in the clinics, and for consults, is supervised by the chief resident and faculty urologist.

- Emergency procedures requiring access to the operating room are supervised by the oncall faculty member who participates in all surgical procedures. The URO-II resident is encouraged to enact patient management plans while progressing through the first year consults and to educate patients and families to the best of his/her ability under supervision of chief resident and/or faculty.
- The resident is encouraged to use information technology and on-line measures to support patient care decisions and patient education. All residents have access to EMR and iPads.
- The resident is taught the basics of urological procedures such as cystoscopy, ureteroscopy, PCNL, and urologic prosthetics.
- Instrumentations, parts, pieces, and disposable, are mastered during the course of this year. There is progressive experience in basic transurethral surgery.
- At Site #7, the URO-1 resident is responsible for all pre-op evaluation (under faculty supervision), scheduling surgical procedures, coordinating pre-op work-up, medical cardiac clearances, and approval from the administration for surgery.

The resident is assigned to Andrology and Endourology services.

#### Teaching Method(s):

• Clinical Teaching Conferences (M&M QIPS; Pyelogram Conferences, Pre-op; Journal Club, etc.)

#### **Evaluation Method**(s) and Frequency:

- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty
- In-service exam
- 360 evaluation

## 2. Medical Knowledge

URO-II level is expected to be the main organizer and presenter at the Preoperative Conference on each Wednesday, under the direct supervision of the Executive Chief Resident.

The resident is expected to set-up a study plan for his/her level of URO-II training and is expected to acquire progressive efficiency and competency in the following components in medical knowledge.

- a. Must be knowledgeable about established and evolving practice patterns in clinical urology and cognitive sciences; under the tutelage of the Executive Chief Resident.
- b. Demonstrate an investigative and analytical approach to clinical urology. Specifically, the resident would be required to participate in research projects, as well as other projects, such as articles and book chapters, to enhance medical knowledge.
- c. Participation in conferences, which are listed on the urology website and in the urology handbook, is expected.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

# **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

# 3. Practice-Based Learning and Improvement

URO-II level must demonstrate the ability to investigate and evaluate their care of patients. With URO-II participation at urology conferences, rounds, in the operating room, and other areas, the resident is expected to acquire progressive proficiency and competency in the following components in Practice-Based Learning and Self Improvements.

- **a.** Identify strengths and deficiencies and limits in one's knowledge and expertise. This may be pointed out during evaluations, conferences, presentations of the pre-operative conferences cases, etc.
- **b.** With such feedback, the resident is expected to set learning and improvement goals and thus establish a study habit to improve on practice-based learning and improvement.

**c.** Formative evaluation is expected to incorporate feedback into daily practice. Using available information technology, the resident is expected to locate and assimilate evidence of scientific studies related to their patient's health problems.

Also, the resident is expected to participate, to the best of their ability, in the education of the patient's family, students, interns, and other non-physician healthcare providers. This responsibility will increase over the course of the year.

## Teaching Method(s):

- Clinical teaching
- Conferences (including Campbell's Club)
- Journal Club
- Quizzes

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

# 4. Interpersonal and Communication Skills

URO-II resident will be evaluated constantly in this category. The resident is expected to effectively collaborate and communicate with the patient, the patient's family, and other health care personnel.

The URO-II resident will be responsible for obtaining the patient's medical history and physical in the outpatient surgery and for obtaining consent after explaining the intended procedures under senior supervision.

The resident is expected to communicate effectively with physicians on other services and other health care professionals on the health care teams. The resident is also expected to maintain legible and timely comprehensive medical records, which are reviewed by senior resident and faculty for thoroughness.

## Teaching Method(s):

- Role-modeling
- Clinical teaching
- Case-based learning

## **Evaluation Method**(s) and Frequency:

- In-service exam
- Focused observation (with feedback)
- 360 evaluation
- Quarterly Evaluation by faculty

## 5. Professionalism

URO-II resident must demonstrate a commitment to carrying out his or her professional responsibility and adhering to ethical principles.

URO-II resident will be expected to demonstrate compassion, integrity, and respect for the patients and ancillary paramedical non-physician. Feedback from the patients and paramedical non-physicians will be used to evaluate professionalism. Sensitivity to diverse patient population is absolutely expected.

## Teaching Method(s):

- Mentoring
- Case-based teaching
- Conferences
- Role-modeling

## **Evaluation Method**(s) and Frequency:

- Focused observation (with feedback)
- 360 evaluation
- Quarterly Evaluation by faculty

## 6. System-Based Practice

The URO-II resident is expected to be aware and be responsive to the larger context and system of healthcare and to use resources smartly.

The URO-II under the tutelage of the senior residents and faculty will coordinate patient care and work with case managers and clinical coordinators and thus be an advocate for optimal patient care. He or she will be encouraged to participate in identifying systems errors and implementing new solutions. Quality Improvement Projects (QIP) are initiated and monitored.

## Teaching Method(s):

- Journal Club
- Clinical teaching
- Conferences

## **Evaluation** Method(s):

- In-service exam
- Quarterly Evaluation by faculty
- 360 evaluation

## In Summary:

At the completion of URO-II, the resident should be well versed in appropriate history taking, basic cystoscopic, ureteroscopic, PCNL nephroscopic and prosthetic procedures. The URO-II resident is expected to master basic urologic information including anatomy, physiology, pharmacology, basic diagnostic algorithms including pertinent history, physical, laboratory and diagnostic imaging, techniques, findings, and methods of interpretations. Residents completing the first year of urology will be able to evaluate patients with common urologic complaints, such as urologic frequency or flank pain, as well as evaluate common urologic presenting signs, such as microscopic hematuria. He/she will be able to manage the care of the pre- and post-operative urologic patient as well as demonstrates competence in the outpatient management of common urologic patient problems, such as lower urinary tract symptoms in men that are secondary to bladder outlet obstruction. Also, the URO-II resident's organizational skills are put to use as he/she will be scheduling and coordinating the surgical schedules at the VA APU and for veterans having their surgical procedure at site #1. In addition, the resident will have gained significant experience in:

## **Endourology:**

\*Appropriate introduction and use of rigid and flexible cystoscopes; rigid and flexible nephroscopes

\*Percutaneous renal access, tract dilatation, and lithotripsy

## Andrology:

\*Thorough knowledge in work-up and placement of inflatable penile prosthesis as well as artificial urinary sphincter prosthetic surgical procedures.

\* Site #7: Management of out-patient clinic and coordinated surgical cases and perform urologic procedures at the APU based on experience and case complexity under faculty supervision.

URO-II cont'd

# Resident Surgical Educational Program and List of Procedures: Lines of Progressive Responsibility

The procedures listed below are what each level of house-officer is capable of performing. All house-officer levels listed below have completed a one-year General Surgery residency.

At the end of URO-II year, the respective HO should be proficient in each of the procedure listed below. The HOs are evaluated every quarter, as the year progresses.

HO-2 (URO-II) Objective evaluations are designed on the following procedures:

The resident is expected to master basic urologic information including anatomy, physiology, pharmacology, basic diagnostic algorithms including pertinent history, physical, laboratory and diagnostic imaging, techniques, findings, and methods of interpretations. Resident completing the first urologic year will be able to evaluate patients with common urologic complaints such as urologic frequency or flank pain as well as evaluate common urologic presenting signs such as gross and microscopic hematuria. He or she will be able to manage the care of the pre and post operative urologic patient as well as a gain experience and competence in the outpatient management of common urologic patient problems such as lower urinary tract symptoms in men secondary to bladder outlet obstruction. These objectives are achieved by clinical rotation to the Tulane University Hospital and Clinics, University Medical Center New Orleans (UMCNO) and Southeast Louisiana Veterans Health Care System. The URO-II resident is under the direct supervision of senior residents and faculty including the procedures below:

*Phallus:* dorsal slit; circumcision; biopsy; placement of two pieces and three-piece inflatable penile prosthesis under supervision.

*Urethra:* biopsy; meatotomy; excision of caruncle; excision condyloma; extract foreign body; external urethrotomy; internal urethrotomy; and urethral dilation.

*Prostate:* trans-rectal ultrasound of prostate with needle biopsy; perineal incision and drainage of the abscess.

*Bladder*: punch cystostomy; open cystostomy; cystolithotomy; bladder biopsy and fulguration.

*Ureter*: Ureteroscopy – rigid and flexible; and Holmium laser lithotripsy.

*Kidney*: ESWL

*Scrotal Contents:* incision and drainage of abscess; excision of lesion of cord; and excision of skin lesion.

*Miscellaneous:* hernia repair-inguinal, microscopic urinalysis.

URO-II cont'd

**Diagnostic and Endoscopic Procedures:** urethroscopy; rigid and flexible cystoscopy; ureteral catheterization; ureteral catheterization with pyelogram; ureteral catheterization stent placement - differential function; pyelogram, intravenous pyelogram, percutaneous nephrostogram; loop-o-gram; retrograde; urethrogram - cystogram; cystourethrogram; and cystometrogram, Transrectal ultrasound and prosthesis biopsy (ureteroscopy  $\pm$  biopsy, Holmium laser lithotripsy and stone basketing, nephroscopy  $\pm$  biopsy with Holmium laser lithotripsy and ultrasonic lithotripsy - depending on the proficiency of the resident.) Assistant at urologic laparoscopic procedures; Bedside assistants for robotic da Vinci procedures including radical prostatectomy, pyeloplasty, partial nephrectomy, radical cystectomy, etc.

Adrenal: None

# URO-III Level

During the third year of training (URO-III) resident site rotations are:

- 1. Tulane University Hospital and Clinic (site #1)
- 2. Children's Hospital CHNO (*site #2*)
- 3. University Medical Center New Orleans (UMCNO) (site #3)

The goals and objectives of the URO-III rotation at Children's Hospital in New Orleans is to ensure the development of knowledge and skills required for this URO-III resident to independently provide the best care possible for children with all urologic disorders, under the direct supervision of three specialty board-certified pediatric urologists

In order to achieve this objective, the program provides six months of clinical activity at Children's Hospital in New Orleans. Throughout this rotation, the residents are actively involved in the management of various pediatric urologic problems. During the six months, the resident will exhibit increasing responsibility in clinical settings including outpatient clinic visits, inpatient consultation, operating room, emergency room patient encounters, inpatient post-operative care, and inpatient and outpatient surgery.

. The resident has other general pediatric services available for the management of patients at Children's Hospital. This provides excellent interaction with physicians and team members from other non-urologic services and fosters the teaching and interactive skills.

Knowing the Lines of Progressive Responsibility, these clinical activities will allow the pediatric urology resident to increase their patient care skills and provide an opportunity for practice-based learning and improvement, enhance their interpersonal and communication skills, professionalism, and system-based practice. Upon completion of the six-month rotation, each resident is expected to be able to function competently and independently in pediatric urology upon successful graduation from the urology program.

Between URO-III and graduation at URO-V level, the resident continues to participate in pediatric urology conferences, Visiting Professors lectures, etc; to continue enhancing pediatric urology knowledge base.

## The remainder of URO-III is spent at sites #1 & 3.

At Site #1 the URO-III level is assigned to endourology and urodynamics. The resident is expected to increase his knowledge as well as procedural skills in cystoscopic and transurethral procedures, ureteroscopic, percutaneous nephroscopic, laparoscopic and robotic skills. At this level, the resident will be an assistant for laparoscopic and robotic procedures. Based on the skills acquired, the progressive line of responsibility will be advanced.

On the urodynamics service, the resident rotates with all faculty members who specialize in urodynamics and female urology. The resident is expected to evaluate these patients and participate in the diagnostic workup, make diagnoses and treatment plan which has to be approved by the faculty. This resident will also participate in surgical procedures at sites # 1 & 3.

At site #3 this resident is responsible for organizing patients who have incontinence related issues. Working with the urodynamics specialized faculty, this resident schedules diagnostic as well as surgical procedures at site #3.

## 1. Patient Care

URO-III resident is expected to provide patient care that is compassionate and appropriate and communicate effectively with the pediatric urology patients and their families, gather essential information to make decisions about diagnostic and therapeutic plans and be able to consult and educate patients after discussing and approval from the pediatric urology faculty. The difference between practicing in a pediatric versus adult healthcare environment is stressed during their rotation. Also, progressive advances are made in Endourology and in the field of urinary incontinence at sites #1 & 3 respectively.

#### Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

#### **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 2. Medical Knowledge

He/she is expected to set up a study plan for his/her level of URO-III training, Resident is expected to acquire progressive efficiency and competency in the following components in medical knowledge.

- a. Must be knowledgeable about evolving practice patterns in clinical urology and cognitive sciences, focusing on Pediatric Urology, Endourology, and urinary incontinence.
- b. Demonstrate an investigatory and analytic thinking approach to clinical urology. Specifically, would be required to participate in research projects, such as articles and book chapters to enhanced the medical knowledge
- c. Participation in the conferences which are listed on the urology website and in the urology handbook is expected.
- d. This year is when the resident is introduced to clinical, basic science research and clinical trials.

#### Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 3. Practice-Based Learning and Improvement

URO-III level must demonstrate the ability to investigate and evaluate the care of patients. With URO-III participation in the urology conferences, rounds, in the operating room, and other areas, this resident is expected to acquire progressive proficiency and competence in the following components in Practice-Based Learning and Self Improvements.

- **a.** Identify strengths and deficiencies in strengths and limits in one's knowledge and expertise. This may be pointed out during evaluations, conferences, presentations of the pre-operative conferences, etc. This is a unique rotation to learn skills on the Pediatric Urology service, endourology, and urinary incontinence.
- **b.** With such feedback, the resident is expected to set learning and improvement goals and thus establish a study habit to improve on practice-based learning and improvement.
- **c.** Formative evaluation is expected to be incorporated into daily practice. With the information technology that is available, the residents are expected to locate and assimilate evidence of scientific studies related to their patients' health care problems.

Also, the resident is expected to participate, to the best of their ability, in the education of patient families, students, interns, and other non-physician healthcare providers. This will responsibility will increase over the course of the year.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation and feedback
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 4. Interpersonal and Communication Skills

URO-III resident will be evaluated constantly in this category. The resident is expected to effectively collaborate and communicate compassionately with patients their families and other health care providers.

The URO-III resident will be responsible for obtaining history and physicals of patients in the outpatient surgery, obtain consent after explaining the procedure to the family on the Pediatric Urology rotation and patients and family on the adult services.

The resident is expected to communicate effectively with physicians on other services and other health care professionals on the health care teams. He is also expected to maintain legible and timely comprehensive medical records EMR which are reviewed by faculty for thoroughness and feedback.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

# **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 5. Professionalism

URO-III resident must demonstrate a commitment to carrying out his or her professional responsibility and to adhere to ethical principles.

URO-III resident would be expected to demonstrate compassion, integrity, and respect for the patients and family. Feedback from the patients and paramedical non-physicians will be used to evaluate professionalism. Sensitivity to diverse patient population is expected.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

# **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 6. System-Based Practice

URO-III resident is expected to be aware and be responsive to the pediatric urology and endourologic context in the system of healthcare and to use resources smartly.

The URO-III under the tutelage of the senior residents' and faculty will have to coordinate patient care and work with case managers and clinical coordinators and thus be an advocate for optimal patient care. He or she will be encouraged to participate in identifying system errors and implementing new solutions.

Quality Improvement Project (QIP) during URO-III is an expectation. *Teaching Method(s):* 

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

# **Evaluation Method(s) and Frequency:**

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## In Summary:

The resident is provided with sufficient exposure to didactic lectures and basic research to gain an understanding of scientific investigation. The resident gains the ability to participate in clinical trials and to evaluate reports of new technology and the implications of basic science finding as they may translate to clinical utility in the future. The resident gains experience in the management of pediatric patients at Children's Hospital. He or she gains a sophisticated level of understanding of pediatric urology congenital abnormalities and diseases.

The resident refines the skills needed for initial evaluation and consultation of pediatric urology and adult patients and the management of laboratory and diagnostic imaging techniques as well as management of the pre and post-operative care. The resident gains experience in endoscopic, laparoscopic, robotic and open surgical techniques in pediatric and adult patients and in diagnosing and managing patients with urinary incontinence

# **Resident Surgical Educational Program and List of Procedures: Lines of Progressive Responsibility:**

The procedures listed below are what each level of house-officer at URO-III is capable of performing.

At the end of URO-III year, the respective HO should be proficient in each of the procedure listed below. The HOs are evaluated as the year progresses.

HO-3 (URO-III) Objective evaluations are designed on the following procedures:

The resident is provided with sufficient exposure to didactic lectures and basic research to result in an understanding evaluation of current information, formulation of questions that are answerable by experiment. The principles of study design, the methodology of basic science and clinical investigation are the analysis and reporting of results. The resident gains the ability to participate in clinical trials and to evaluate reports of new technology and the implications of basic science finding as they may translate to clinical utility in the future. The resident gains experience in the management of pediatric patients at Children's Hospital. He or she gains a sophisticated level of understanding of pediatric urology congenital abnormalities and diseases. The resident refines the skills needed for initial evaluation and consultation of pediatric urology patients and the management of laboratory and diagnostic imaging techniques as well as management of the pre and post-operative care. Advances in endourologic laparoscopic and robotic skills are expected as well as in urodynamics.

## All procedures below are under faculty supervision

*Phallus*: dorsal slit; circumcision; excision of tumor/cyst; biopsy; and repair of injury, placement of semi-rigid and inflatable penile prosthesis under supervision.

URO-III cont'd

*Urethra*: biopsy; meatotomy; excision of caruncle; drainage of urinary extravasation; diverticulectomy - male; diverticulectomy - female; excision condyloma; extract foreign body; external urethrotomy; and internal urethrotomy.

*Prostate*: laser prostatectomy (Greenlight and Revolix) trans-rectal ultrasound of prostate with needle biopsy; endoscopic incision and drainage of abscess; perineal incision and drainage of abscess; prostatectomy - transurethral; prostatectomy - retropubic, simple; prostatectomy - suprapubic; and prostatectomy - transvesico-capsular, robotic

**Bladder**: punch cystostomy; open cystostomy; cystolithotomy; litholapaxy; electrohydraulic lithotripsy; repair of rupture; bladder tumor resection, endoscopic; bladder tumor biopsy, endoscopic; diverticulectomy; bladder neck incision - endoscopic; bladder neck revision - open; anterior vaginal repair; pereyra procedure; sling procedure; and Leadbetter procedure.

*Ureter*: rigid and flexible ureteroscopy biopsy, endoscopic; open biopsy; repair ureterocele; meatomy, endoscopic; cystourethroscopy ureteral calculus manipulation; and Holmium laser lithotripsy, stone basketing.

*Kidney*: exploration; needle biopsy; open biopsy; drainage of peri-renal abscess; percutaneous nephroscopy; percutaneous nephroscopy - calculus extraction; percutaneous nephroscopic lithotripsy, and laparoscopic and robotic procedures.

*Scrotal Contents*: incision and drainage of abscess; excision of lesion of cord; hydrocele; excision of lesion or tumor; vas ligation; epidiymotomy; epididymectomy; hydrocelectomy; spermatocelectomy; reduction, torsion testicle; excision, torsion hydatid; excision, lesion of tunica vaginalis; excision lesion of testis; orchiectomy, simple; repair injury to testis; insert testicular prosthesis; and excision of skin lesion.

*Miscellaneous*: hernia repair-inguinal; hernia repair-lumbar; hernia repair-ventral; exploratory laparotomy; closure of evisceration; inguinal lymphadenectomy, superficial; and pelvic lymphadenectomy.

*Diagnostic and Endoscopic Procedures*: urethroscopy; cystoscopy; ureteral catheterization; ureteral catheterization with pyelogram; ureteral catheterization - differential function; ureteroscopy and biopsy ± Holmium laser lithotripsy, stone basketing; pyelogram; intravenous pyelogram; percutaneous; nephrostogram; percutaneous nephrostomy placement; loop-o-gram; fluoro-pyelogram; urethrogram - retrograde; cystogram; cystourethrogram; vasogram; cystometrogram; ureteral pressure profile;; cavernosogram, percutaneous access for kidney stones, and urologic laparoscopic procedures (renal cyst decortications, nephrectomy, etc.) (Laparoscopy and robotic and associated procedures - depending on the proficiency of the resident.)

Adrenal: None

## URO-IV Level

During the Fourth year of training (URO-IV) resident site rotations are:

- a. Tulane University Hospital and Clinic TUH&C(site #1)
- b. University Medical Center New Orleans UMCNO (*site #3*)
- c. Southeast Louisiana Veterans Health Care System (*site* #7)
- d. West Jefferson Medical Center WJMC (site#5)

## 1. Patient Care

URO-IV level is responsible for routine histories and physical examination as well as conducting basic ward work on the clinic and private patients. All of the patients seen by the URO-IV resident in the emergency department, the admit room, in the clinics and for consults are supervised by the chief resident and faculty physician.

Emergency Procedures requiring access to the operating room is supervised by the on-call faculty member who participates in all surgical procedures. The URO-IV resident is encouraged to enact patient management plans as he progresses through his third year, consults and educates patients and families to the best of his/her ability under supervision of chief resident or faculty.

At site #3 the URO-IV is in charge of the Tulane Urology service. This a significant rotation for the URO-IV level as he/she matures and is getting ready for a chief residency at the URO-V level. At site #3 the URO-IV is responsible for organizing and conducting (under faculty supervision) the outpatient clinics, scheduling and conducting outpatient diagnostic procedures, scheduling and coordinating the surgical procedures in the operation room. This rotation really tests the organizational skill of the URO-IV resident because the operative cases have to be coordinated with the subspecialty of the faculty who supervises the surgical procedures. Organizing the O.R. schedule, required supplies and financial clearance is expected of the URO-IV resident.

In addition, the URO-IV resident rotates through site #1 where he/she performs the advanced surgical procedures on patients from site #4. The surgical cases from site #4 are distributed to the residents based on the complexity of the cases. The most complex cases are assigned to the URO-V. The URO-IV will be performing the surgical procedures which are not at the level of the URO-V resident.

He or she is encouraged to used information technology and on-line measures to support patient care decisions and patient education. During rotations at WJMC, the URO-IV resident refines his/her skills in urinary incontinence and urodynamics and associated surgical procedures

The procedures of the URO-IV resident which is taught and is expected to be mastered are listed separately in tab 1 under **Resident Surgical Educational Program and List of Procedures:** Lines of Progressive Responsibility.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 2. Medical Knowledge

He/She is expected to set up a study plan for his/her level of URO-IV training. The resident is expected to acquire progressive efficiency and competency in the following components in medical knowledge.

- a. Must be knowledgeable about established and evolving practice patterns in clinical urology and cognitive sciences
- b. Demonstrate an investigatory and analytic thinking approach to clinical urology. Specifically, URO-IV resident would be required to participate in research projects, projects such as articles and book chapters to enhance medical knowledge
- c. Participation in conferences which are listed on the urology website and in the urology handbook is expected.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

#### **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 3. Practice-Based Learning and Improvement

URO-IV level must demonstrate the ability to investigate and evaluate the care of patients at their level of training. With URO-IV participation in urology conferences, rounds, in the operating room, and other areas, this resident is expected to acquire progressive proficiency and competency in the following components in Practice-Based Learning and Self Improvements.

- **a.** Identify the strengths and deficiencies in one's knowledge and expertise. This may be pointed out during evaluations, conferences, presentations at pre-operative conferences, etc.
- b. With such feedback, the resident is expected to set learning and improvement goals and thus establish a study habit to improve on practice-based learning and improvement. Formative evaluation is expected to be incorporated into daily practice. Additionally, with the information technology information available, the residents are expected to locate and assimilate evidence of scientific studies related to their patients' health problems. Also, the resident is expected to participate, to the best of their ability, in the education of patient families, students, interns, and other non-physician healthcare providers. This responsibility will increase over the course of the URO-IV year.

## **Teaching Method**(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 4. Interpersonal and Communication Skills

URO-IV resident will be evaluated constantly in this category. The resident is expected to effectively collaborate and communicate with patients, their families, and other health care providers.

The URO-IV resident will be responsible for obtaining history and physicals of patients in the outpatient surgery unit, obtain consents after explaining procedures (under faculty and EMR guidance).

The resident is expected to communicate effectively with physicians on other services and other health care professionals on the health care teams, especially at site #3. He is also expected to

URO-IV cont'd

maintain legible and timely comprehensive medical records which are reviewed and signed off by faculty for thoroughness.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

#### 5. Professionalism

URO-IV resident must demonstrate a commitment to carrying out his or her professional responsibility and to adhere to ethical principles.

URO-IV resident would be expected to demonstrate compassion, integrity, and respect for the patients and family. Feedback from the patients and paramedical non-physicians will be used to evaluate professionalism. Sensitivity to diverse patient population is expected.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 6. System-Based Practice

URO-IV resident is expected to be aware and be responsive to the endourologic, oncologic, etc. context in the system of healthcare and to use resources smartly.

The URO-IV under the tutelage of the senior residents' and faculty will have to coordinate patient care and work with case managers and clinical coordinators and thus be an advocate for optimal

#### URO-IV cont'd

patient care. This is especially stressed at site #3. He or she will be encouraged to participate in identifying system errors and implementing new solutions.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

# Resident Surgical Educational Program and List of Procedures: Lines of Progressive Responsibility

The procedures listed below are what each URO-IV level of house-officer is capable of performing. At the end of URO-IV year, the respective HO should be proficient in each of the procedure listed below. The HOs are evaluated quarterly, as the year progresses.

HO-4 (URO-IV) Objective evaluations are designed on following procedures:

In the third urologic year, there are three major educational objectives.

The first is to enhance the coordination and implementation of longitudinal evaluation and management of urological adult patients through ambulatory and inpatient settings. The goal includes mastery of urologic procedures essential to office based practice including cystoscopy, vasectomy, ultrasonography (transrectal, as well as abdominal, pelvic and scrotal) and shock wave lithotripsy, interpretation of uroflow and urodynamics.

The second educational objective is to train the residents to master the necessary skills for the provision of consultative services including evaluation and management of inpatients and outpatients but additionally to communicate effectively with various medical colleagues. Paticipation in research and QIPs projects continue at this level.

*Phallus:* dorsal slit; circumcision; excision of tumor/cyst; biopsy; partial amputation; completeamputation; insert non-inflatable, semi-rigid prosthesis; insert non-inflatable, rigid prosthesis; insertion of inflatable, single-unit prosthesis; excision of fibrosis corpora; chordelysis; repair injury and manage Peyronie's disease

*Urethra:* biopsy; meatotomy; excision of caruncle; repair injury; drainage of urinary extravasation; hypospadias repair; microsurgical closure of fistula; partial excision; urethrectomy; diverticulectomy - male; diverticulectomy - female; excision of condyloma; extract foreign body; external urethrotomy; internal urethrotomy; and urethroplasty.

*Prostate:* trans-rectal ultrasound of prostate with needle biopsy; open biopsy; endoscopic incision and drainage of abscess; perineal incision and drainage of abscess; prostatolithotomy; prostatectomy - transurethral; prostatectomy - retropubic, simple; prostatectomy - retropubic, radical; prostatectomy - suprapubic; prostatectomy – perineal transvesico-capsular. (**Robotic prostatectomy - depending on the proficiency of the resident.**)

*Bladder:* punch cystostomy; open cystostomy; cystolithotomy; litholapaxy; electrohydraulic lithotripsy; repair of rupture; cystostomy for electrocoagulation; bladder tumor resection, endoscopic; bladder tumor biopsy, endoscopic; cystectomy, partial; cystectomy, radical; cystectomy, simple; diverticulectomy; cystoplasty ileum; cystoplasty sigmoid; cystoplasty cecum; cystoplasty ileocecal; cystoplasty vesicostomy; cystoplasty repair of fistula - vesico cutaneous; cystoplasty repair of fistula - vesico sigmoid; cystoplasty repair of fistula - vesico rectal; cystoplasty repair of fistula - vesico vaginal; bladder neck revision - endoscopic; bladder neck revision - open; Marshall Marchetti; anterior vaginal repair; pereyra procedure; sling procedure; and Leadbetter procedure. (Robotic Radical Cystectomy - depending on the proficiency of the resident – Also, bedside and console surgeon)

*Ureter:* biopsy, endoscopic; open biopsy; repair ureterocele; meatomy, endoscopic; open repair, ureterocele; ureterolithotomy; ureteral repair - lysis; ureteral repair; ureteral repair - rectrocaval ureter; ureteral repair - ureteroneocystostomy, simple; ureteral repair - ureteroneocystostomy, ureteroplasty; ureteral repair - excision and anastomosis; ureteral repair - ureteroplasty; ureteral repair - uretero-calyceal anastomosis; ureteral repair - close uretero vaginal fistula; ureteral repair - close uretero intestinal fistula; uretero-enterostomy: ileal conduit; uretero-enterostomy: colon conduit; uretero-enterostomy: ureterostomy: uretero-enterostomy: uretero-enterostomy: ileocecal pouch; uretero-enterostomy: ileocecal conduit; ureteroscopic tumor biopsy; \* ureteroscopic tumor removal; ureteroscopic stone extraction; ureteroscopic lithotripsy; cystourethroscopy ureteral calculus manipulation; and cystourethroscopy ureteral calculus extraction, and endoureterotomy

*Kidney:* exploration; repair of trauma; needle biopsy; open biopsy; drainage of peri-renal abscess; drainage of renal abscess; nephrostomy; pyelostomy; nephropexy; denervation of pedicle; closure of renal fistula; nephrolithotomy; abdominal transperitoneal nephrectomy; extra peritoneal nephrectomy; partial nephrectomy; nephro-ureterectomy; nephroureterectomy with partial cystectomy; excision or decortication of cyst; pyeloureteroplasty; percutaneous nephroscopy - calculus extraction; percutaneous nephroscopy lithotripsy, and Laparoscopy for all renal procedures (includes: Robotic Partial Nephrectomy, Robotic Pyeloplasty, Laparoscopic Nephrectomy, Laparoscopic nephro-ureterectomy depending on proficiency of the resident).

Scrotal Contents: incision and drainage of abscess; excision of lesion of cord; hydrocele; excision

#### URO-IV cont'd

of lesion of tumor; vas ligation; epidiymotomy; epididymectomy; microscopic ligation spermatic

veins; macroscopic ligation spermatic veins; microscopic vaso-vasotomy; vaso-epididostomy; macroscopic vaso-vasotomy; hydrocelectomy; spermatocelectomy; reduction, torsion testicle; excision, torsion hydatid; excision, lesion of tunica vaginalis; excision lesion of testis; orchiectomy, simple; orchiectomy, radical; orchiotomy; repair injury to testis; testis biopsy; insert testicular prosthesis; and excision of skin lesion.

*Miscellaneous:* hernia repair-inguinal; hernia repair-lumbar; hernia repair-ventral; exploratory laparotomy; pelvic exenteration, anterior; pelvic exenteration, complete; biopsy retroperitoneal tumor; colostomy; closure of evisceration; inguinal lymphadenectomy, superficial; inguinal lymphadenectomy, deep; pelvic lymphadenectomy; and gastrostomy tube placement.

*Diagnostic and Endoscopic Procedures:* urethroscopy; cystoscopy; ureteroscopy; nephroscopy; ureteral catheterization; ureteral catheterization with pyelogram; ureteral catheterization - differential function; pyelogram, intravenous; pyelogram, percutaneous; nephrostogram; nephromogram; percutaneous nephrostomy placement; loop-o-gram; fluoro-pyelogram; urethrogram - retrograde; cystogram; cystourethrogram; renal cystogram; percutaneous renal cystogram; cystometrogram; urethral pressure profile; Fluorourodynamics; Whittaker test - percutaneous; Whittaker test - open; and cavernosogram, urologic laparoscopy; percutaneous renal access; and robotic da Vinci procedures (bedside and console).

*Adrenal:* exploration; excision of cyst; adrenalectomy or partial adrenalectomy; and adrenalectomy, bilateral. Laparoscopic adrenalectomy.

## URO-V Level (Chief Resident)

During the Fifth year of training (*URO-V*) resident site rotations are:

a. Tulane University Hospital and Clinic (TUH&C) (site #1)

#### 1. Patient Care

URO-V level is responsible for routine histories and physical examination as well as conducting basic ward work on clinic and private patients. All of the patients seen by the URO-V resident in the emergency room, the admit room, in the clinics and for consults are under supervision of faculty physicians. As the year progresses this resident is given more independence in the decision making process.

Emergency Procedures requiring access to the operating room is supervised by the on-call faculty member who participates in all surgical procedures. The URO-V resident is encourage to enact patient management plans as he progresses through his consults and educate patients and families to the best of his/her ability under supervision of chief resident or faculty.

He/She is encouraged to used information technology, iPad and on-line measures to support patient care decisions and patient education.

The resident is taught advanced urological procedures such as laparoscopy and robotic surgery.. Instrumentations, parts and pieces and disposable are mastered during the course of this year. This process was initiated at the URO-IV level. There is progressive experience in transurethral ureteroscopic and percutaneous surgery.

The resident is assigned to Endourology services. uro-oncology and major urologic reconstructive procedures. This resident spends 6 months as the Executive Chief Resident. During this period the URO-V resident coordinates the conferences, on-call schedules and faculty assignments to surgical procedures, assigns residents on a daily basis for clinic coverage, procedural coverage and surgical coverage so as to enhance the learning experience of each resident in the Urology department. This experience is invaluable as the URO-V residents are maturing towards graduation and on to independent urologic practice upon graduation.

The procedures that the URO-V resident is taught and is expected to master are listed separately in tab 1 under **Resident Surgical Educational Program and List of Procedures: Lines of Progressive Responsibility.** 

#### Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

#### **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

#### 2. Medical Knowledge

URO-V level is expected to act as the main organizer and supervise presentation by the URO-II resident at the preoperative conference on each Wednesday. He/She is expected to set-up a study plan for his/her level of URO-V training. The URO-V resident is expected to acquire progressive efficiency and competency in the following components in medical knowledge.

- a. Must be knowledgeable about established and evolving practice patterns in clinical urology and cognitive sciences
- b. Demonstrate an investigatory and analytic thinking approach to clinical urology. Specifically, would be required to continue participation in research projects, projects such as articles and book chapters to enhance medical knowledge
- c. Participation in conferences which are listed on the urology website and in the urology handbook is expected.

## **Teaching Method**(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 3. Practice-Based Learning and Improvement

URO-V level must demonstrate the ability to investigate and evaluate the total care of patients. With URO-V participation in the urology conferences, rounds, in the operating room, and other areas, this resident is expected to acquire progressive proficiency and competency in the following components in Practice-Based Learning and Self Improvements, as he/she is preparing for independent unsupervised practice in urology.

- **a.** Identify strengths and deficiencies and limits in one's knowledge and expertise. This may be pointed out during evaluations, conferences, presentations at pre-operative conferences, etc.
- **b.** With such feedback, the resident is expected to set learning and improvement goals and thus establish a study habit to improve on the practice-based learning and improvement.
- **c.** Formative evaluation is expected to be incorporated into their daily practice with the information technology information available. The resident is expected to locate and assimilate evidence of scientific studies related to their patients' health problems.

Also, the resident is expected to participate, to the best of their ability, in the education of patient families, students, interns, and other non-physician healthcare providers, under faculty guidance and supervision. This responsibility will increase over the course of the year.

## **Teaching Method**(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 4. Interpersonal and Communication Skills

URO-V resident will be evaluated constantly in this category. The resident is expected to effectively collaborate and communicate compassionately with patients and their families; and other health care providers. The URO-V resident will be responsible for obtaining history and physicals of patients in the outpatient surgery; obtain consent after explaining the procedures to patients and family members.

The resident is expected to communicate effectively with physicians on other services and other health care professionals on the health care teams. He is also expected to maintain legible and timely comprehensive medical records EMR which are reviewed by faculty for thoroughness, before locking.

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

## 5. Professionalism

URO-V resident must demonstrate a commitment to carrying out his or her professional responsibility and to adhere to ethical medical principles.

URO-V resident would be expected to demonstrate compassion, integrity and respect for the patients. Feedback from the patients and paramedical non-physicians will be used to evaluate professionalism. Sensitivity to diverse patient population is absolutely expected. He/she serves as a role model for the other residents on the Urology service.

# Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

## **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

# 6. System-Based Practice

URO-V resident is expected to be aware and be responsive to the urologic context in the system of healthcare and to use resources smartly. As Executive Chief Resident, he/she is especially responsible for teaching junior residents in this category

URO-V cont'd

## Teaching Method(s):

- Clinical Teaching
- Conferences
- Didactics
- Visiting Professors and Extramural Conferences

# **Evaluation Method**(s) and Frequency:

- In-service exam
- 360 evaluation
- Focused observation with feedback (ongoing)
- Quarterly Evaluation by faculty

The URO-V, under the tutelage of faculty, will have to coordinate patient care and work with case managers and clinical coordinators and thus be an advocate for optimal patient care. He or she will be encouraged to participate in identifying system errors and implementing new solutions.

## In Summary:

During URO-V, the chief residency year, the resident acquires skills in the supervision of junior residents, develops further skills in the teaching of junior residents and masters advanced and sophisticated urologic techniques. During this year, the resident gains organizational, systems, leadership and communication skills necessary to be an effective leader and administrator. At the conclusion of the year, the resident is well versed in the responsibilities of clinical practice, including both inpatient and outpatient venues. Under faculty supervision, the chief resident runs the inpatient urology service as well as outpatient clinic. They gain responsibility in complex open, endoscopic, laparoscopic and robotic urologic procedures. By the completion of the URO-V year of urology training, the resident is prepared to take the examination for board certification, and to assume his or her place as a member of the urology profession, without supervision.

# Resident Surgical Educational Program and List of Procedures: Lines of Progressive Responsibility

At the end of URO-V year, the respective HO should be proficient in each of the procedure listed below. The HOs are evaluated quarterly and as the year progresses.

HO-5 (URO-V) Objective evaluations are designed on following procedures:

During Urology year IV, the Chief Residency year, the resident acquires skill in the supervision of Junior residents, develops further skill in the teaching of junior residents and masters the most advanced and sophisticated urologic procedures. During this year, the resident gains

#### URO-V cont'd

organizational skill needed to be an effective leader and administrator. At the conclusion of the year, the resident is well versed in the responsibilities of clinical practice both inpatient and outpatient services and will have the competency needed to succeed in his or her future practice endeavors. Residents will learn responsibility of leadership as Chief Resident at each campus. Under faculty supervision they will run the inpatient urology service as well as weekly outpatient clinics. They will gain responsibility in complex open, Laparoscopic and Robotic urologic procedures. By the completion of the 4th year of urology training, our residents should be prepared to take the examination for Board certification and to assume his or her place as a member of the urology profession.

*Phallus:* dorsal slit; circumcision; clitorectomy; excision of tumor/cyst; biopsy; partial amputation; complete amputation; insert non-inflatable, semi-rigid prosthesis; insert non-inflatable, rigid

prosthesis; insertion of inflatable, single-unit prosthesis; insertion of inflatable, triple-unit prosthesis; excision of fibrosis corpora; chordelysis; repair injury; and Peyronie's disease.

*Urethra:* biopsy; meatotomy;; repair injury; drainage of urinary extravasation; hypospadias repair; macrosurgical closure of fistula; microsurgical closure of fistula; partial excision; urethrectomy; diverticulectomy - male; diverticulectomy - female; urethrolithotomy; excision condyloma; extract foreign body; external urethrotomy; internal urethrotomy; urethroplasty; repair urethro-vaginal fistula; repair transpubic injury; repair suprapubic injury; and repair perineal injury.

*Prostate:* trans-rectal ultrasound of prostate with needle biopsy; open biopsy; endoscopic incision and drainage of abscess; perineal incision and drainage of abscess; repair of recto-urethral fistula; prostatolithotomy; prostatolithotomy - perineal; prostatolithotomy - suprapubic; prostatolithotomy endoscopic; prostatectomy transurethral; prostatectomy cryosurgical; prostatectomy - retropubic, simple; prostatectomy - retropubic, radical, laparoscopic radical prostatectomy; prostatectomy - suprapubic; prostatectomy - simple perineal; prostatectomy - radical perineal; prostatectomy - suprapubic; prostatectomy - perineal; prostatectomy

**Bladder**: punch cystostomy; open cystostomy; cystolithotomy; litholapaxy; electrohydraulic lithotripsy; repair of rupture; cystostomy for tumor excision; cystostomy for electrocoagulation; bladder tumor resection, endoscopic; bladder tumor biopsy, endoscopic; cystectomy, partial; cystectomy, radical; cystectomy, complete laparoscopic cystectomy; diverticulectomy; cystoplasty ileum; cystoplasty sigmoid; cystoplasty cecum; cystoplasty ileocecal; cystoplasty vesicostomy; cystoplasty repair of exstrophy; cystoplasty repair of fistula - vesico cutaneous; cystoplasty repair of fistula - vesico sigmoid; cystoplasty repair of fistula - vesico rectal; cystoplasty repair of fistula - vesico vaginal; bladder neck revision - endoscopic; bladder neck revision - open; insert artificial sphincter for incontinence; anterior vaginal repair; pereyra procedure; sling procedure; Leadbetter procedure; ileal conduit; neo-bladder and Indiana pouch urinary reservoir.

#### URO-V cont'd

Ureter: biopsy, endoscopic; open biopsy; repair ureterocele; meatotomy, endoscopic; open repair, ureterocele; ureterolithotomy (open, laparoscopic and robotic); ureteral repair - lysis; ureteral repair - excision of ovarian lesion; ureteral repair - rectrocaval ureter; ureteral repair ureteroneocystostomy, simple; ureteral repair - ureteroneocystostomy, ureteroplasty; ureteral repair - excision and anastomosis; ureteral repair - ureteroplasty; ureteral repair - ureteroureterostomy; ureteral repair - uretero-calyceal anastomosis; ureteral repair - close uretero vaginal fistula; ureteral repair - close uretero intestinal fistula; ureterotomy for tumor; ureterotomy partial; ureterotomy - complete; ureterostomy - in situ; ureterostomy cutaneous; ureteroenterostomy: ileal conduit; uretero-enterostomy: colon conduit; uretero-enterostomy: ureterosigmoidostomy; uretero-enterostomy; rectal bladder and sigmoid pull through; ureteroenterostomy: ileocecal pouch; uretero-enterostomy: ileocecal conduit; uretero-enterostomy: uretero-enterostomy: Camay procedures; ureteroscopic tumor biopsy; ureteroscopic tumor removal; ureteroscopic stone extraction; ureteroscopic lithotripsy; cystourethroscopy ureteral calculus manipulation; and cystourethroscopy ureteral calculus extraction. Laparoscopic and robotic procedures on ureters.

*Kidney:* exploration; repair of trauma; needle biopsy; open biopsy; drainage of peri-renal abscess; drainage of renal abscess; nephrostomy; pyelostomy; nephropexy; denervation of pedicle; closure of renal fistula; close reno-intestinal fistula; nephrolithotomy; abdominal transperitoneal nephrectomy; extra peritoneal nephrectomy; lumbar nephrectomy; thoraco-abdominal nephrectomy; partial nephrectomy; calycectomy; nephro-ureterectomy; nephroureterectomy with partial cystectomy; infundibuloplasty; excision or decortication of cyst (laparoscopic and robotic approach to these procedures); symphsiotomy; pyeloureteroplasty; renal vascular surgery; renal bench surgery; percutaneous nephroscopy; percutaneous nephroscopic and robotic procedures.

*Scrotal Contents:* incision and drainage of abscess; excision of lesion of cord; hydrocele; excision of lesion of tumor; vas ligation; epidiymotomy; epididymectomy; microscopic ligation of spermatic veins; macroscopic ligation spermatic veins; microscopic vaso-vasotomy; macroscopic vaso-vasotomy; hydrocelectomy; spermatocelectomy; reduction, torsion testicle; excision, torsion hydatid; excision, lesion of tunica vaginalis; excision lesion of testis; orchiectomy, simple; orchiectomy, radical; orchiotomy; repair injury to testis; testis biopsy; insert testicular prosthesis; and excision of skin lesion.

*Miscellaneous:* hernia repair-inguinal; hernia repair-lumbar; hernia repair-ventral and stomal; exploratory laparotomy; pelvic exenteration, anterior; pelvic exenteration, complete; biopsy retroperitoneal tumor; excision of retroperitoneal tumor; retroperitoneal node dissection; colostomy; closure of evisceration; inguinal lymphadenectomy, superficial; inguinal lymphadenectomy, deep; pelvic lymphadenectomy; and gastrostomy tube placement. Including laparoscopic and robotic approaches.

*Diagnostic and Endoscopic Procedures:* urethroscopy; cystoscopy; ureteroscopy; nephroscopy; ureteral catheterization; ureteral catheterization with pyelogram; ureteral catheterization - differential function; pyelogram, intravenous; pyelogram, percutaneous; nephrostogram;

URO-V cont'd

percutaneous nephrostomy placement; loop-o-gram; fluoro-pyelogram; urethrogram retrograde; cystogram; cystourethrogram; cystometrogram; urethral pressure profile; Whittaker test percutaneous; Whittaker test open; and cavernosogram, all diagnostic and therapeutic urologic laparoscopic procedures on kidney, ureter, bladder intra-abdominal; Fluorourodynamics; Whittaker test percutaneous; Whittaker test open; and cavernosogram, urologic laparoscopy; percutaneous renal access; and robotic da Vinci procedures.

*Adrenal:* exploration; excision of cyst; open, robotic and laparoscopic adrenalectomy or partial adrenalectomy; adrenalectomy, bilateral; and radical adrenalectomy (laparoscopic and robotic approaches.