

## Welcome to Urology!

Please note:

All students should report to the 6 East Residents Room at 6:00 am on Monday morning to meet with the Urology residents. If students are late or cannot find anyone, you may contact the on-call urology resident at PIC 1586. The chief and senior Urology residents are available to assist and advise with any scheduling changes as it pertains to morning rounds.

You are expected to spend at least one day in the clinic or OR with the Urology rotation director. In addition to this, you will be responsible for arranging a meeting with the rotation director at the conclusion of your rotation for feedback. The residents will assist you in arranging time in the clinic or OR with the rotation director as well. You are also welcome to contact the rotation director directly at any time.

**The Urology Rotation is broken down into three weeks: Benign Urology (1 week), Urologic Oncology (1 week) and Pediatric Urology (1 week).** The order of these weeks can be flexible based on opportunities during the rotation. We require that during your rotation you spend some time in the following areas to get a broad exposure to Urology: Pediatric Urology Clinic, Pediatric Urology Outpatient Surgery, Main Operating Room Robotic Surgery and Outpatient Urology Surgery/Endoscopy. Additional operative and clinic experiences are available including all faculty clinics at the Cancer Center and Fontaine (500 Fontaine, 3<sup>rd</sup> floor), all outpatient surgery cases, main operating room (non-robotic surgery), urology procedure clinic, urodynamics clinic and ultrasound.

A weekly email will be sent which includes all operating room cases and faculty/resident assignments. Please ensure the residents have your email to include you in this communication. All faculty and residents can provide assistance with determining high-yield medical student activities for the week. Please seek out advisement in this regard, in addition to the core experiences noted above. A sample of the Urology schedule is noted below, but subject to change.

For your convenience we have included the orientation packet for your review. Please review this in its entirety before the rotation. It is also available on the Student Source website.

The orientation packet also includes the website link for the AUA Core Curriculum for Medical Students for your required background reading.

EPA evaluations are encouraged on Urology and multiple faculty and residents are trained to give you EPA feedback including Drs. Rapp, Smith, Kern, the Urology residents and others. Dr. Smith is a master assessor, if you wish to do an MA assessment, this has to be scheduled through iCAN as with any MA assessment. Please note that Dr. Smith cannot do Master Assessor evaluations when he has patient care responsibilities and/or when he is working with a student in the context in which he would be evaluating the student on the rotation. This is a School of Medicine EPA stipulation.

### **From the urology residents:**

Welcome to the team! We created this orientation PowerPoint because our service runs a bit differently than general surgery. We think this is what you really need to know about the rotation. It should answer most of your questions. Please review prior to starting your rotation. If you have any

questions or concerns, please contact the Urology 4<sup>th</sup> year resident. Looking forward to working with you!

[https://docs.google.com/presentation/d/1KwfuRWvegnXWCrbNVvUGWI1\\_AgcoHwYEj6Ln3wV6BZc/edit?usp=sharing](https://docs.google.com/presentation/d/1KwfuRWvegnXWCrbNVvUGWI1_AgcoHwYEj6Ln3wV6BZc/edit?usp=sharing)

Sincerely,

Meghan Rover  
Urology Rotation Coordinator  
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and

Ryan P. Smith, MD  
Assistant Professor of Urology  
Male Reproductive Medicine and Surgery  
Residency Program Director  
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## UVA Urology Rotation

**Rotation Supervisor:** Dr. Ryan Smith

**Rotation Administrator:** Meghan Rover

**Duration:** 3 weeks

**Report to:** 4<sup>th</sup> Year Urology Resident

**Time to Report:** 6:00am

**Place to Report:** 6 East, call Urology Resident On-Call (PIC#1586) with questions.

Typical Day: 6:00 am - 6:00 pm

### **Suggested Preparatory Reading:**

1. American Urological Association Medical School Curriculum\*

<http://www.auanet.org/education/medical-student-core-content-and-other-resources.cfm>

2. Review basic Genitourinary Anatomy (suggest Smith and Tanagho's General Urology-online access available via library)

3. Hinman's Atlas of Urologic Surgery-Available in Urology Resident Room (good review of surgical anatomy prior to cases)

### **Number of students per rotation: 1-2**

**Rotation Description:** The student will learn pathophysiology, evaluation, and treatment for diseases of the urinary tract, male genital tract, retroperitoneal space and adrenal glands. The rotation allows students to have a broad exposure to urology, both office and operative. Students are expected to attend weekly conferences when available (generally Wednesday mornings). Students will round with the team on inpatients and participate in the outpatient evaluation and preoperative, intraoperative, and postoperative management of patients with urologic disorders. Students are evaluated based on performance in the clinic, operating room and on rounds. **Completion of EPA 7 is required during the rotation (develop a well-formed, focused, pertinent clinical question based on patient care).** This will be done as a topic presentation scheduled during your rotation (often Thursday morning of the second or third week via Zoom to maximize faculty/resident participation). There is no night call. Students typically round on one weekend morning on the first and second weeks of the rotation.

### **General Goals:**

- Learn to perform a history, physical examination and office evaluation of patients with common urologic diseases under the direction of resident and attending staff: urologic oncology (renal tumors, transitional cell carcinoma, prostate cancer, testicular cancer and adrenal tumors); stone disease; incontinence and bladder dysfunction; urinary tract infections; bladder outlet obstruction and lower urinary tract symptoms; erectile dysfunction and male infertility
- Learn about and observe common diagnostic techniques used in the urology clinic: ultrasound, urinalysis, flow rate, urodynamics and cystoscopy
- Learn the indications for and reading of common urologic radiographic evaluation: plain films, IVP, nuclear medicine, ultrasonography and CT

- Learn the fundamentals of pharmacologic treatment of common urologic conditions
- Observe common urologic surgical procedures such as radical nephrectomy, radical cystectomy with urinary diversion, radical prostatectomy, ESWL, ureteroscopy, TURP and TURBT.

## SURGERY/OBGYN/ANESTHESIA

### Third Year Clerkship Learning Objectives

- Incorporate ethical, social and diversity perspectives to provide culturally sensitive health care to all patients.
- Conduct a complete medical history that is relevant to a patient's needs.
- Conduct a physical examination pertinent to the nature of the visit or chief complaint.
- Document patient encounters using a format appropriate to the clinical situation.
- Present organized oral summaries of patient encounters using a format appropriate to the clinical situation.
- Demonstrate communication skills that will facilitate an effective therapeutic relationship with patients and their families as appropriate.
- Formulate a prioritized differential diagnosis and provide an initial diagnostic and therapeutic plan for patients with common problems in **obstetrics**, with attention to cost-effectiveness and patient preference.
- Formulate a prioritized differential diagnosis and provide an initial diagnostic and therapeutic plan for patients with common problems in **gynecology**, with attention to cost-effectiveness and patient preference.
- Formulate a prioritized differential diagnosis and provide an initial diagnostic and therapeutic plan for patients with common conditions requiring **surgical intervention**, with attention to cost-effectiveness and patient preference
- Formulate a prioritized differential diagnosis and provide an initial diagnostic and therapeutic plan for patients with conditions requiring the **consultation of a surgical subspecialist**.
- Formulate a prioritized differential diagnosis and offer initial management plans for common peri-operative **anesthetic** complications.
- Participate in the counseling patients who require surgical, obstetric, or perioperative procedures.
- Participate in the perioperative, intraoperative, and postoperative care of patients.
- Identify the clinical manifestations of and prepare an initial management plan for common complications and emergencies in surgical patients.
- Select and interpret diagnostic studies in the preoperative evaluation of patients requiring surgery and anesthesia.
- Demonstrate knowledge of anatomy pertinent to the perioperative care of patients undergoing surgical procedures.
- Apply knowledge of routine postoperative care including the identification and initial management of common complications.
- Explain the normal physiologic changes of pregnancy.
- Select and interpret common diagnostic studies in the pregnant patient.
- Describe the physiologic changes from puberty through menopause.
- Apply knowledge of routine antepartum, intrapartum and postpartum care in the evaluation and management of the pregnant patient.
- Apply recommended prevention strategies/health maintenance recommendations to the care of women throughout the lifespan.
- Identify the impact of preconception care including the impact of genetics, medical conditions and environmental factors on maternal health and fetal development.

- Apply knowledge of American Society of Anesthesiology (ASA) classification systems for assessing patients requiring anesthesia.
- Participate in the monitoring of patients undergoing operative anesthesia.
- Demonstrate knowledge of basic pharmacologic principals of commonly used anesthetic agents. (Induction agents, Volatiles anesthetics, Opiates, Neuromuscular blocking agents and reversal agents, and Local anesthetics.)
- Describe physiological principles of anesthesia practice.
- Outline steps of general anesthesia including induction, maintenance, emergence, and recovery to formulate an appropriate anesthetic plan for a given patient.
- Function as a team member, interacting with patients, family, nurses, and medical staff in a professional manner.

**Assessment will be based on:**

1. **EPA 7 Completion/Rotation Presentation:** Medical students are expected to give an approximately 5 minute presentation to the other students, Urology residents and faculty during their rotation. This does not require a power point presentation or handout; however, you may elect to do either. Choose a topic that aligns with EPA 7 and an area you are interested in, such an interesting patient you saw or something that is pertinent to your chosen field as well as urology (for example, if you are going into Ob/Gyn, a good presentation would be stones in pregnancy). Typically these presentations are given Thursday mornings during the second or third week of your rotation (via Zoom). **If you are coming to the end of the rotation and have not given your presentation, remind a faculty member or resident.**
2. Resident and faculty evaluation based on core competencies. A consensus opinion from the residents and faculty will be used based on daily performance on rounds, in the operating room, and in ambulatory clinics. Specific narrative commentary will be included in these evaluations. Where possible faculty from each of the week long segments (Benign, Urologic Oncology and Pediatric Urology will be included).
3. Staff Urologist evaluation in operating room, inpatient service, and ambulatory clinic. **All rotating students should attempt to spend at least 1 day in clinic or the operating room with the Rotation director.**

**Feedback**

You will be expected to arrange for a formal rotation feedback session with the rotation director prior to completion of your rotation.

**Required Readings:** American Urological Association National Medical School Curriculum:

<http://www.auanet.org/education/medical-student-core-content-and-other-resources.cfm>

- Acute Scrotum
- Pediatric UTI
- Adult UTI
- Urinary Stones
- Incontinence
- BPH
- ED
- Hematuria

- Prostate Cancer/PSA

**Suggested Readings:** American Urological Association National Medical School Curriculum:

- Uroradiology Cases
- Urology Procedures: Male and Female catheterization
- Atlas of Surgical Videos

**Required rotations: Benign Urology, Urologic Oncology and Pediatrics (see the Faculty schedule/assignments amendment within this document). These rotations should be broken down into 1 week each of your three week rotation. We try to keep the Pediatric week grouped together, but will often mix benign and oncology during the other weeks. The day to day schedule should be confirmed with a resident or faculty member the day before and is subject to change.**

**Please discuss the rotating pediatrics schedule directly with the Pediatric Urology attendings. Generally there is an OR experience available daily and Dr. Kern is in clinic on Mon/Wed and Dr. Corbett on Tues/Thurs.**

**Benign Urology Faculty: Smith, Costabile, Schenkman, Ortiz, Rapp, Beller, Zillioux, Gillock**

**Urologic Oncology Faculty: Greene, Isharwal, Krupski, Culp, Downs, Ibilbor**

**Pediatric Urology Faculty: Kern, Corbett**

In order to provide a well-rounded urology experience, we request that you complete at least one day in the following areas during your three weeks:

1. Urology clinic with the Rotation director
2. Pediatric urology clinic
3. Pediatric outpatient surgery
4. Main operating room robotic surgery
5. Outpatient urology endoscopy and surgery

Please discuss and divide assignments with other rotating students prior to each week. A weekly schedule will be sent to you to let you know what is occurring each week. You are expected to discuss your assignments with a resident or faculty member the day before. There are multiple other rotational experiences available to you and we leave students some latitude for self-directed learning in choosing among these based on interest. The rotation director and residents can assist with this. These rotations include:

1. Adult Urology clinic at Fontaine or the Cancer Center
2. Adult Urology Outpatient Surgery
3. Adult Urology Procedure clinic at Fontaine

4. Main operating room (non-robotic surgery)
5. Ultrasound clinic
6. Urodynamics clinic

Students are always encouraged to pursue their individual interests and may concentrate on any area they choose. **The 4<sup>th</sup> year Urology resident will serve as an additional point of contact (in addition to the rotation director) during the rotation.** They request that you review this orientation – **What you need to know for your urology rotation:**

[https://docs.google.com/presentation/d/1KwfuRWvegnXWCrbNVvUGWII\\_AgcoHwYEj6Ln3wV6BZc/edit?usp=sharing](https://docs.google.com/presentation/d/1KwfuRWvegnXWCrbNVvUGWII_AgcoHwYEj6Ln3wV6BZc/edit?usp=sharing)

### **Oral presentations:**

This is a guide for your presentations on your Surgery rotations. Start with reading the example. You should be able to present this in **no more than 2-3 minutes**. It helps to rehearse it out loud before rounds. Next, look at each component for tips and details. Note that complex ICU patients will require a systems based presentation – talk with R-4 resident for help with this as needed.

If you are not getting it, please ask for feedback. Ask when the presentation is still fresh in people's minds to increase your chances of getting targeted, constructive feedback.

### **Example:**

Mr GU is a 70 yr old male who is POD # 2 from radical cystoprostatectomy with bilateral pelvic lymph node dissection with creation of an ileal conduit for muscle invasive bladder cancer

Yesterday he was weaned off pressors, he got a unit of blood, we gave him ice chips for comfort, the pain service removed the local anesthetic from his epidural, and the ostomy team saw him for teaching

Overnight he got a bolus of saline and 250 of albumin

Vitals: He has been afebrile with a heart rate in the 90s to 110s, his blood pressure was in the 100s to 110s systolic, and his O2 sat was 92+ on 2L nasal cannula

I&Os: He had 250 out from his conduit over 12 hrs and 70 from his drain

On exam he is drowsy and mildly uncomfortable, his abdomen is soft without distension with mild tenderness around his incisions, his midline incision is well approximated with staples and without erythema or discharge, his stoma is pink with two stents in place draining clear pink tinged urine with no mucous, his surgical drain has thin fruit punch colored output

Labs: His white count is 10 from 15 yesterday, H&H is 7 and 21 from 7 and 22 yesterday, creatinine is stable at 1.2

No pending cultures

Imaging: his chest x-ray this morning showed bibasilar atelectasis

So for my assessment and plan, I think he's under-resuscitated because his urine output was low and he's still tachycardic. He got a unit of blood yesterday but his H&H didn't go up like it should have. Today I would give him a unit of blood. Since he's off pressors, I don't think he needs to be in the ICU. He's got atelectasis on his x-ray, so I was planning on seeing him later today to make sure he knows how to use his incentive spirometer. I would also let him try clear liquids today since he had no nausea.



## **Components:**

*Patient ID:* (Name) is a (\_\_) yr old (M/F) who is POD# (\_\_) from (this surgery) for (this reason)

After we have heard you say the full surgery once, please abbreviate it (ex. Cystectomy with conduit for bladder cancer)

### *Interval history:*

Include what we did for the patient yesterday and overnight (look at notes, orders, and talk to nurses and residents)

Include any changes to the patient's clinical status, what was done about it, and how the patient responded (ex. Patient went into a fib with RVR and dropped his pressures so they gave him three rounds of IV metoprolol and he went back into sinus and his pressured normalized)

4 surgery questions (example below):

1. Pain is controlled.
2. Tolerating diet without nausea or vomiting.
3. Passing flatus no BM.
4. Has not yet gotten out of bed.

Keep it simple and precise.

### *Vitals:*

Always report in the same order:

*Tmax* (if below 38.5, you do not need to report *Tcurrent*)

*HR* (rounds to tens digit and give the range, if he had a very abnormal value like 130s, briefly explain- "he is back to 90s now after getting metoprolol last night")

*BP* (round to tens, give range, report current if had an out of box value, include rate of pressors if applicable)

*RR* (never report unless something absurd and real like 6 bpm in a narcotized patient or 30+ bpm in a patient with pulmonary edema)

*O2 sat* (report lowest value on current *O2* requirement)

### *I&Os:*

Just outputs (unless there are special circumstances, see below) and their color.

Just over the last 12 hour shift

Round generously (0.5 L is much easier to hear than 475 mL and clinically is the same)

Special circumstances

Diuresis: report net balance over last 24 hours ("net negative 2 L")

Worsening edema/pulmonary edema: report net balance over last 24 hrs and admission ("net positive 2 Ls yesterday and up 9 L since admission")

Poor oral intake and long hospital stay: report oral intake ("only 300 in by mouth")

Tube feeds: report if actively changing or nutrition is an issue

### *Exam:*

*Constitutional*: how do they look from the door? Asleep, drowsy, confused, smiling, wincing in pain, holding a barf bag, diaphoretic

*Abdomen*: distended or not? Tender or not? Where?

*Incision*: “well approximated” is a good term that means there are no areas where it is coming apart, “no erythema or drainage” is more instructive and clear than “clean”

*Drains*: NG tubes, urinary conduits, ileostomies, colostomies, surgical drains, and catheters all count and should always be discussed (these are arguably the most important aspect of our daily physical exams); describe what you see, not what you think it is: “brown particulate” is easier to understand than “gastric contents”, “clear fruit punch with no clots” is more instructive than “bloody”, “thin pink” is better than “serosanguinous” which could mean anything from thin pink to thick and cloudy red

Urine: clear yellow, pink lemonade, fruit punch, merlot red with clots

JP: serosanguinous, sanguineous, purulent

*Labs*:

Please round (8 and 24 is much easier to hear and understand than 7.8 and 23.8)

Compare with day prior but do not have to say “up” or “down”

Omit normal values

Do not forget to look at culture data

**Never report old labs**

If you do not see labs, you can check “Chart Review”, “Labs”, and see if there are any ordered and if they have been drawn (will say “In Process”), then you can say “labs were ordered but not drawn this morning” or “labs were drawn but back yet” rather than “no labs”

*Imaging*:

Do not be fooled by a missing radiology report- always check “Chart Review” and “Imaging” to see if anything was ordered and completed

Always look at the pictures whether or not there is a report (treat your surgery rotation like a radiology rotation- we care about pictures more than anyone else)

*A&P*:

**This is the most important part of your presentation**

Roll through the early part of the presentation and take your time on the assessment

This is where you put everything together

Put yourself out there by telling us what you think about how the patient is doing and why

Do not use jargon to try to sound smart

Start simple and ask yourself “is the patient better, worse, or the same as yesterday”

Try to explain the things that you came across that were abnormal

Think about what the patient needs to do to get out of the hospital (it is the same for everyone)

1. Tolerating a diet (just hydrating is fine for non-bowel surgeries)
2. Comfortable on oral pain medications (comfortable is a relative term)
3. Ambulating (or has the appropriate support/discharge plan for their mobility and daily living needs- rehab, nursing facility, etc)
4. Draining their urine (not always “voiding” on Urology, may mean knows how to change their urostomy appliance or care for their catheter)
5. \*Return of bowel function (not necessary for non-bowel surgeries)