



Beth Israel Deaconess  
Medical Center



HARVARD MEDICAL SCHOOL  
TEACHING HOSPITAL

# **Beth Israel Deaconess Medical Center Urology Residency Program**

## **Educational Goals and Objectives**

### **Post Graduate Year 4**

**Senior Pediatric Urology Rotation  
Length: 3 months**

## ***PGY 4 Educational Goals & Objectives***

### **Location: Boston Children's Hospital**

Two months are spent as the senior at Boston Children's Hospital. During this rotation, inpatient and outpatient care is performed. The resident mentors junior residents rotating through this service. Resident functions at the senior level in the outpatient clinic, on the floor and in the operating room. Advanced operating skills are obtained. proficiency in practice based learning by using the literature to evaluate and improve outcomes. The resident will demonstrate an ability to identify areas needing improvement in his/her learning and effective methods of addressing them.

**Patient Care: Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.**

1. Assist with basic pediatric urologic surgery including surgical correction of testicular maldescent, hernia and hydrocele
2. Assist with performance of ureteral implantation
3. Assist and perform pediatric circumcision
4. Assist with reconstructive procedures pertaining to the kidneys and ureters

Methods of Assessment:

1. Direct observation
2. Evaluation by other providers and staff

**Medical Knowledge: Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.**

1. To gain an understanding of the pathophysiologic diseases in the pediatric population
2. To understand the specific disease entities including:
  - a. Hypospadias
  - b. Exstrophy
  - c. Congenital anomalies of the bladder, testis, and penis
  - d. Voiding dysfunction
  - e. Urinary tract dysfunction
  - f. Urologic malignancies in the pediatric population
3. To gain a better understanding of radiologic and pathologic diagnostic tests and their interpretation through regular attendance of the pediatric urology conference
4. Develop an understanding of pediatric urodynamics and the interpretation of a set of studies

Methods of Assessment:

1. Direct observation
2. Evaluation by other providers and staff
3. Case log review
4. In-service scores

## ***PGY 4 Educational Goals & Objectives***

**Practice-based Learning and Improvement: Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:**

1. Identify strengths, deficiencies, and limits in one's knowledge and expertise;
2. Set learning and improvement goals;
3. Identify and perform appropriate learning activities;
4. Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;
5. Incorporate formative evaluation feedback into daily practice;
6. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems;
7. Use information technology to optimize learning; and,
8. Participate in the education of patients, families, students, residents and other health professionals.

Methods of assessment:

1. Portfolio review
2. One-on-one evaluation by program director

**Interpersonal and Communication Skills: Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Residents are expected to:**

1. Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
2. Communicate effectively with physicians, other health professionals, and health related agencies;
3. Work effectively as a member or leader of a health care team or other professional group;
4. Act in a consultative role to other physicians and health professionals; and,
5. Maintain comprehensive, timely and legible medical records, if applicable.

Methods of assessment:

1. Direct observation
2. 360 degree evaluation
3. Review of medical records

**Professionalism: Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:**

1. Compassion, integrity, and respect for others;
2. Responsiveness to patient needs that supersedes self-interest;

## ***PGY 4 Educational Goals & Objectives***

3. Respect for patient privacy and autonomy;
4. Accountability to patients, society and the profession; and,
5. Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

Methods of assessment:

1. Direct observation
2. 360 degree evaluation

**Systems-based Practice: Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.**

**Residents are expected to:**

1. Work effectively in various health care delivery settings and systems relevant to their clinical specialty;
2. Coordinate patient care within the healthcare system relevant to their clinical specialty;
3. Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate;
4. Advocate for quality patient care and optimal patient care systems;
5. Work in inter-professional teams to enhance patient safety and improve patient care quality; and,
6. Participate in identifying system errors and implementing potential systems solutions.

Methods of Assessment

1. Structured case discussion (M&M conferences)
2. Direct observation
3. Evaluation by other providers and staff

**Elective**

**Length: 3 months**

## ***PGY 4 Educational Goals & Objectives***

### **Loction: BIDMC**

Three months are spent in one month block rotations to provide exposure to other fields including but not limited to Interventional Radiology, Renal Transplant, Urogynecology, etc. During elective block, residents are encouraged (*but not required*) to spend a 1-2 month block of time with Interventional Radiology, Urogynecology, and Transplant services. The residents will serve as acting fellows and are expected to gain knowledge in image-guided interventions as they pertain to urology. Specifically, gaining experience in percutaneous renal access using ultrasound and fluoroscopy. Trainees will gain medical knowledge in of image-guided treatment options. During the renal transplant rotation, residents will perform evaluation of a living kidney donor, recognizing medical, social, and psychological circumstances that preclude renal donation, and understanding the choice of kidney to be taken from the donor. Additionally, the trainees will gain experience in understanding of and proficiency with the techniques of open and laparoscopic donor nephrectomy and identification of surgical complications and their management.

**Adult Clinical Rotation - Clinical Senior - Acting as Chief Resident**  
**Length: 6 months**

## ***PGY 4 Educational Goals & Objectives***

### **Location: BID - Needham**

Six months are spent as the clinical senior at BID - Needham where residents further refine skills and competency in general urology, urologic oncology, and infertility. Any deficiencies in case log are remediated at this point with directed activities. Options for Radiation Oncology, attendance at multidisciplinary oncology clinic, observation of interventional radiology procedures also exists at this time. The trainee will participate in urodynamics laboratory and the infertility clinic. Scholarly activity continues and exposure to major operative procedures is gained. The resident participates in the on call schedule. Outpatient medicine continues and inpatient consultation skills are gained.

By the end of the six-month rotation, residents are expected to:

**Patient Care and Procedural Skills: Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.**

1. Hone and solidify knowledge with our clinical pathways and learn optimal inpatient management and cost-effective medicine.
2. Develop as role models for younger residents
3. Learns to identify subtle unusual physical findings pertinent to genitourinary conditions
4. Able to employ routine diagnostic tests
5. Learns to plan to appropriately manage complex clinical problems
6. Learns to counsel patients on complex urologic conditions
7. Identifies and manages common and uncommon intraoperative and post-operative complications

Methods of Assessment:

1. Direct observation
2. Evaluation by other providers and staff

**Medical Knowledge: Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.**

1. Begin acquiring more advanced skills in the assessment of the urologic patient
2. Broaden knowledge base regarding pathophysiology of common urologic conditions including obstructive uropathy, urologic malignancy, urologic trauma, voiding dysfunction, stone disease and reproductive medicine
3. Have a more refined knowledge of the necessary preoperative work-up and postoperative management of the urologic patient
4. Have a more refined knowledge of urologic cancers, their evaluation and clinical staging and the options for treatment and follow-up

Methods of Assessment:

1. Direct observation
2. Evaluation by other providers and staff

## **PGY 4 Educational Goals & Objectives**

3. Case log review
4. In-service scores
5. The resident will complete the Fundamentals of Laparoscopy (FLS) course – a curriculum designed to introduce the basics of laparoscopy surgery and assess the resident for his/her knowledge and technical skills.

### **Patient Care/ Medical Knowledge**

1. Develop increasing confidence and independence in performing complex endoscopy and appropriate level open urologic surgeries under moderate supervision
2. Perform a complete urologic history and physical examination and a microscopic evaluation of the urinary sediment; based on this information, the resident should be able to order appropriate diagnostic procedures in a cost-effective manner
3. Perform and assess urodynamic evaluation in the context of the patient's urologic complaint
4. Perform cystoscopic examination with a rigid and flexible cystoscope
5. Perform urethral catheterization and suprapubic cystostomy
6. Perform retrograde pyelogram, ureteral stent placement, uretero-rensoscopy and lithotripsy
7. Assist in percutaneous endourologic procedures such as renal access and nephrolithotomy
8. Perform scrotal surgery including vasectomy and varicocelectomy
9. Perform adult circumcision
10. Assist with a simple or radical nephrectomy and radical orchiectomy
11. Perform endoscopic procedures on the bladder, prostate and urethra
12. Assist in laparoscopic surgery

Methods of Assessment: As listed above.

**Practice-based Learning and Improvement: Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:**

1. Identify strengths, deficiencies, and limits in one's knowledge and expertise;
2. Set learning and improvement goals;
3. Identify and perform appropriate learning activities;
4. Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;
5. Incorporate formative evaluation feedback into daily practice;
6. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems;
7. Use information technology to optimize learning; and,
8. Participate in the education of patients, families, students, residents and other health professionals.
9. Actively responds to and uses feedback from all members of health care team

## ***PGY 4 Educational Goals & Objectives***

10. Effectively and efficiently searches evidence-based summary medical resources to provide optimal care
11. Demonstrates increased understanding of study design and hypothesis testing
12. Identifies areas in his/her practice that can be changed to improve processes and outcomes
13. Learns to mentor junior colleagues
14. Formally teaches medical students and junior residents
15. Able to appropriately manage patients and their families' needs
16. Recognizes conflict of interest

Methods of assessment:

1. Portfolio review
2. One-on-one evaluation by program director

**Interpersonal and Communication Skills: Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Residents are expected to:**

1. Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
2. Communicate effectively with physicians, other health professionals, and health related agencies;
3. Work effectively as a member or leader of a health care team or other professional group;
4. Act in a consultative role to other physicians and health professionals; and,
5. Maintain comprehensive, timely and legible medical records, if applicable.
6. Role models effective communication skills to junior colleagues
7. Able to provide patient-centered counseling in cases of acute and probable terminal illness

Methods of assessment:

1. Direct observation
2. 360 degree evaluation
3. Review of medical records

**Professionalism: Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:**

1. Compassion, integrity, and respect for others;
2. Responsiveness to patient needs that supersedes self-interest;
3. Respect for patient privacy and autonomy;
4. Accountability to patients, society and the profession; and,

## **PGY 4 Educational Goals & Objectives**

5. 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. Demonstrates good team leadership

Methods of assessment:

1. Direct observation
2. 360 degree evaluation

**Systems-based Practice: Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.**

**Residents are expected to:**

1. Work effectively in various health care delivery settings and systems relevant to their clinical specialty;
2. Coordinate patient care within the healthcare system relevant to their clinical specialty;
3. Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate;
4. Advocate for quality patient care and optimal patient care systems;
5. Work in inter-professional teams to enhance patient safety and improve patient care quality;
6. Participate in identifying system errors and implementing potential systems solutions.
7. Understands the process of professional and legal discharge of patient from practice
8. Rapidly generates differential and strategy to finalize diagnosis
9. Learns how to lead a health care team
10. Demonstrates the incorporation of cost awareness
11. Uses decision support systems to provide optimal medical care.

Methods of Assessment

1. Structured case discussion (M&M conferences)
2. Direct observation
3. Evaluation by other providers and staff