

## **UMass Pediatrics- Nephrology Rotation**

### **Goals and Objectives**

#### ***I Patient care***

1. Demonstrate proficiency in taking a comprehensive history of the presenting problem, past medical history, and family history relevant to the chief complaint.
2. Describe the findings on clinical history and examination that would suggest renal disease and require further evaluation and treatment.
3. Demonstrate the proper technique of obtaining a blood pressure for infants, children, and adolescents as part of the comprehensive physical exam
4. Evaluate and treat common renal diseases presenting in the inpatient and out-patient setting (proteinuria, hematuria, hypertension, electrolyte abnormalities, tubulopathies, nephrolithiasis).
5. Provide appropriate patient counseling and lifestyle recommendations for patients with hypertension, single kidney, glomerulonephritis, dysfunctional voiding etc.
6. With the assistance of the nephrologist, the resident will examine urine specimens using a microscope

#### ***II Medical Knowledge***

1. Demonstrates a general understanding of renal pathophysiology including fluid and electrolytes, acid base balance, and blood pressure regulation
2. Differentiate between normal and abnormal renal function. The resident should be knowledgeable of various equations used to calculate a patient's estimated GFR (bedside Schwartz, cystatin C, CKD- epi, etc).
3. Understand the concept of renally dosing medication based on a patient's renal function
4. Discuss abnormal kidney development such as cystic diseases of the kidney, hypoplasia, dysplasia, abnormalities of renal position, and structural abnormalities such as vesicoureteral reflux.
5. Describe the etiologies, diagnosis, management, and complications of both acute kidney injury and chronic kidney disease (including osteodystrophy, anemia, growth failure, developmental delay, and progression to ESRD).
6. Recognize and define hypertension appropriately. Understand the utility of ambulatory blood pressure monitoring in the diagnosis and management of hypertension.

#### ***III Interpersonal & Communication Skills:***

1. Collaborates and effectively communicates with the patient, their family, and other members of the health care team (attending, advanced practitioners, nurses, medical assistants etc.)
2. Develops rapport with parents and children.

#### ***IV Professionalism***

1. Demonstrates sensitivity and respect for parents and patients of diverse ages and of diverse cultural, educational, and socioeconomic backgrounds
2. Demonstrates enthusiasm when participating in your rotation

#### ***V Practice-based Learning***

1. The resident will be responsible for completing a journal club presentation on the last Friday of their rotation. In place of the journal club presentation, the resident may hold two 10-minute talks on a nephrology topic of their choice during their rotation.

2. Radiology rounds takes place every 2<sup>nd</sup> and 4<sup>th</sup> Friday where the pediatric nephrology, urology and radiology providers meet to discuss interesting cases
3. Interdepartmental renal rounds are held every Tuesday from 1-230 pm in room [AS7-2072](#)

#### ***IV. Systems-based Practice***

1. Utilize the electronic medical record to provide documentation of patient's medical care and to communicate among medical staff and with referring physicians.
2. Work with other health care professionals outside of the UMass facility, for example VNA nursing and school nurses.