# PED1-4120/F & PED1-4120/H PEDIATRIC NEPHROLOGY

**Course Policies and Procedures** 

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## Location

Le Bonheur Outpatient Center, 51 N. Dunlap, Suite 400

# Faculty

The faculty and fellows assigned to the Nephrology Service for the month will supervise students in the evaluation and management of patients.

# Introduction

A general introduction/welcome/description of the course and its activities

The Pediatric Nephrology elective provides students with an opportunity to apply their basic knowledge of renal physiology, acid-base balance, laboratory medicine, renal pathology, history taking and physical examination in diagnosing and children with renal disease. From 30 to 60 outpatients per week 15 patients in hemodialysis unit and 5-10 hospitalized patients at all times are available for teaching. Hematuria-proteinuria, glomerulonephritis, nephrotic syndrome, acute and chronic renal failure, hypertension, congenital genitourinary disorders, renal transplantation and fluid-electrolyte disorders are the most common renal disorders to be evaluated. Principles of both hemodialysis and peritoneal dialysis will be discussed. Observation of the renal biopsy procedure and review of the resulting histology are available. Weekly and monthly renal conferences and seminars are provided.

## **Elective Goals**

At the conclusion of the elective, students will feel comfortable approaching the pediatric patient with outpatient nephrology issues and inpatient consultation questions.

### Elective Objectives Patient Care:

GOAL: Differentiate between normal and pathological states of the renal system.

	Principal Educational Objectives
1.	Describe the age related changes in blood pressure including normal ranges from birth through adolescence and personally measure BP accurately.
2.	Differentiate transient hematuria from clinically significant gross or microscopic hematuria.
3.	Differentiate transient or orthostatic proteinuria from clinically significant proteinuria.

4.	Describe the findings on clinical history and examination that would suggest renal			
	disease and require further evaluation and treatment.			
5.	Apply measures of glomerular and tubular function to determine normal versus			
	abnormal kidney function. Perform a urinalysis			

GOAL: Evaluate and treat common renal diseases presenting in the outpatient setting.

	Principal Educational Objectives
1.	Evaluate and manage the child with a urinary tract infection.
2.	Determine the need for and the extent of the radiographic evaluation required for the patient with a UTI.
3.	Evaluate the patient who presents with hematuria and/or proteinuria.
4.	Diagnose and principals of management the patient with hypertension.
5.	Diagnose and manage common fluid and electrolyte disturbances with intravenous and oral rehydration.

GOAL: Evaluate and manage complicated diseases of the renal system in consultation with a Pediatric Nephrologist.

	Principal Educational Objectives
1.	Diagnose and manage patients with acute and chronic glomerulonephritis including nephrotic syndrome.
2.	Diagnose and manage renal diseases associated with systemic diseases, e.g., systemic lupus, hemolytic-uremic syndrome, ANCA positive diseases, and Henoch-Schoenlein Purpura.
3.	Diagnose and manage issues related to bone disease commonly seen in children with renal disease including growth retardation, renal tubular acidosis, and rickets

### Medical Knowledge:

GOAL: Describe kidney development and measures of renal function.

	Principal Educational Objectives
1.	Discuss the normal infant development of the kidney both anatomy and function.
2.	Discuss measures of renal function including GFR, urinary concentration, proximal tubular function, and acid-base handling.

GOAL: Discuss the physiology of issues related to normal and abnormal renal function.

	Principal Educational Objectives
1.	Discuss handling of drugs by the kidney and dosing of medication for chronic kidney

	disease
2.	Discuss fluid and electrolyte problems in childhood.
3.	Discuss structural problems of the kidney including vesicoureteral reflux, obstructions of the urinary tract, urolithiasis and bladder dysfunction.
4.	Discuss abnormal kidney development such as cystic diseases of the kidney, hypoplasia, dysplasia, abnormalities of renal position, and prune belly syndrome

GOAL: Discuss issues involved with complicated renal disease generally managed in collaboration with a Pediatric Nephrologist.

	Principal Educational Objectives
1.	Discuss the etiologies, diagnosis, management and complications of chronic kidney disease including osteodystrophy, anemia, growth failure, developmental delay, hyperlipidemia and progression to ESRD.
2.	Discuss the principles of renal replacement therapy including hemodialysis, peritoneal dialysis & CRRT.
3.	Discuss the principles and management of the child with a renal transplant.

## Professionalism/Interpersonal Skills and Communication:

GOAL: Develop skills to effectively teach others.

	Principal Educational Objectives
1.	Present a lecture on the nephrologic subject of his/her choice
2.	Demonstrate instruction of medical students in an effective, enthusiastic manner.

## Systems-Based Practice:

GOAL: Function as part of an interdisciplinary team in the management of children with renal diseases.

	Principal Educational Objectives
1.	Discuss the psychosocial and financial aspects of the child with renal disease.
2.	Communicate and work effectively with psychiatrists/psychologists, Child Life, nutritionists, and case managers to provide financial and psychosocial support for children with end stage renal disease and renal transplant.
3.	Discuss use of home and school monitoring of disease including urinary dipsticks, and BP monitoring

### Practice-Based Learning:

GOAL: Utilize and integrate technological advances in the care of children with renal disease

	Principal Educational Objectives
1.	Utilize the electronic medical record to provide documentation of patient's medical care, provide better communication among medical staff and the multiple patient care sites and communicate with referring physicians. Utilize hand held technology to facilitate patient care.

### **Attendance and Required Experiences**

Students will participate in all rounds and seminars of the section and perform histories and physical examinations on selected patients on the consultation service. They will follow the patients daily, formulate plans of management and, under the supervision of the attending. They will review diagnostic results daily on all patients. During their outpatient experience, students will participate in patient encounters similar to the consultation service.

Duty Hours Students should expect to spend 40-60

	Monday	Tuesday	Wednesday	Thursday	Friday
7-8					
8-9					
9-10	Clinic	Clinic	Clinic	Clinic	Clinic
10-11	Clinic	Clinic	Clinic	Clinic	Clinic
11-12	Clinic	Clinic	Clinic	Clinic	Clinic
12-1	Clinic	Clinic	Clinic	Clinic	Clinic
1-2	Clinic	Clinic	Clinic	Clinic	Reading
2-3	Clinic	Clinic	Clinic	Clinic	Reading
3-4	Clinic	Clinic	Clinic	Clinic	Reading
4-5	Clinic	Clinic	Clinic	Clinic	Reading

Rotation Weekly Schedule

# **Student Evaluation**

### PROFESSIONAL CONDUCT

In 1986, the College of Medicine established its Code of Professional Conduct. The document, available in *The Centerscope*, addresses those responsibilities to patients, colleagues, family, and community as well as to the individuals themselves. Following discussion with incoming students, it is assumed that all will subscribe to this code as part of their commitment to the profession of medicine. An egregious professionalism violation may be considered grounds for course failure.

### DECLARATION OF DISABILITY

Any student who would like to self-disclose as a student with a disability in the College of Medicine at UTHSC must register and officially request accommodations through the Disability Coordinator in Student Academic Support Services (SASS). Regardless of a student's geographic location for experiential education, all requests for accommodations must be submitted with supporting documentation and reviewed for reasonableness by the Disability Consultant. Students should contact Laurie Brooks to set up an appointment to discuss specific needs at <a href="https://www.lbrooksto.edu">lbrook15@uthsc.edu</a> or (901) 448-1452. All conversations regarding requests for accommodations are confidential.

#### **DUTY HOURS**

1. Duty hours will be limited to 80 hours per week averaged over a four-week period, no in-house call.

2. Continuous on-site duty, including in-house call, will not exceed 30 consecutive hours. Students may remain on duty additional hours to participate in transferring care of patients, conducting outpatient clinics, maintaining continuity of medical and surgical care, and attending required didactic activities.

3. Students will be provided with one day in seven free from all educational and clinical responsibilities, averaged over a rotation, inclusive of call. One day is defined as one continuous 24-hour period free from all clinical, didactic, and administrative activities.

4. Students should be provided with a 10-hour period after in-house call during which they are free from all patient care activities.

### STUDENT ASSESSMENT

Students have a formative assessment at the half-way mark of the preceptorship and a summative clinical assessment at the end of the rotation based on clinical performance as defined in the objectives.

GRADING SCALE (this is the College of Medicine grading scale adopted for the entire curriculum by the CUME, beginning May 2014.)

Letter Grade	Final Percentage
A	89.5-100
В	79-89
С	67.5-78
F	<u>&lt;</u> 67.49

# Academic Difficulty

Students having difficulty in the course are strongly encouraged to seek help as soon as possible by seeking advice from the resident, fellow, and attending on the service. Students are also encouraged to check with the SASS and the Kaplan Clinical Skills Center to see if academic support is available.

## **Course Evaluation**

Students are strongly encouraged to participate in the Hall Tackett evaluation survey on New Innovations at the conclusion of the course.

## **Textbooks and Literature**

Include a list of required or recommended articles or textbooks and any other resources available to the students.