

**Ultrastructural Pathology**      **Included with On Demand**

## **Society for Ultrastructural Pathology**

Sun, March 12  
4:30 PM - 6:30 PM

### **Electron Microscopy in Pediatric Renal Pathology**

Renal diseases presenting in the pediatric population vary depending on the age. In pre- and early teenage children, the most common causes of renal failure are hereditary diseases, nephrotic syndrome, and systemic diseases. In older children glomerular diseases account for most renal failure cases with hereditary diseases becoming less frequent. Some of these diseases have a classic clinical presentation with a favorable prognosis not requiring renal biopsy. The role of renal biopsy in hereditary diseases has changed as these can be diagnosed by commercial genetic testing panels. However, initial or baseline biopsy may be indicated to stage the changes in glomerular structure. Renal biopsy may be indicated and necessary to establish a correct diagnosis in a subset of nephritis and nephrotic renal diseases, and to evaluate response to therapy in subsequent biopsies. Electron Microscopy has a significant contribution in defining glomerular ultrastructural changes required and/or diagnostic of certain diseases, hereditary and sporadic, and in evaluating progression of glomerular changes overtime.

#### **Course Learning Objectives**

Upon completion of this educational activity, learners will be able to:

The participants will be provided with a review of some renal disease entities encountered in the pediatric population and will be able to describe these diseases in the context of the clinical presentation. Electron Microscopy will be reviewed, emphasizing characteristic and less characteristic ultrastructural changes, potential mimics, and subtleties that may be overlooked. The participants will be able to describe:

- Renal diseases associated with Hematuria in children and adolescents
- Childhood renal diseases presenting as nephrotic syndrome
- Renal diseases associated with Congenital and genetic syndromes
- C3 glomerulopathies in the pediatric population and Dense Deposit Disease
- Subtle and unusual ultrastructural findings that may be encountered in renal pathology

#### **Continuing Medical Education**

The United States and Canadian Academy of Pathology is accredited by the ACCME to provide continuing medical education for physicians.

The United States and Canadian Academy of Pathology designates this live activity for a maximum of *2.0 AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## Presentations

4:30 PM

5:00 PM

### **Selected Renal Diseases Associated with Hematuria in Children and Adolescents**

**John Hicks**, MD, PhD, DDS, Texas Children's Hospital

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5:00 PM

5:30 PM

### **Childhood Nephrotic Syndrome: Podocytopathies and Congenital, Genetic Syndromes**

**Kate Anne VandenHeuvel**, MD, Cincinnati Children's Hospital

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5:30 PM

6:00 PM

### **Current concepts in the diagnosis of C3 glomerulopathies: role of Electron Microscopy in C3 glomerulonephritis, Dense Deposit Disease, and mimics**

**Jean Hou**, MD, Cedars-Sinai Medical Center

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6:00 PM

6:30 PM

### **Subtle EM Findings of Importance in Renal Pathology: When You Really Need the Big Scope**

**David N. Howell**, MD, PhD, Duke University Medical Center