Nephrology

Martin R. Pollak, MD, Chief

Johannes Schlondorff, MD, PhD

The Division of Nephrology is committed to providing the best possible patient care, educating the next generation of academic nephrologists and moving the field of nephrology forward through its clinical, translational and basic research efforts.

Clinical Patient Care

Our clinical mission is to provide the best possible care for patients with kidney disease in both the inpatient and outpatient settings. This includes:

- Rapid patient access to our physicians: all new patients are seen within two days
- Open communication with patients, families and referring physicians
- Evaluation and management of patients pre and post kidney transplant in the Transplant Institute

Education

Our fellowship program focuses on nurturing and educating the next generation of nephrologists. We expect the graduates of our program to be excellent and compassionate nephrologists with rigorous training in clinical and/or laboratory research. Most of our Nephrology graduates go on to highly successful careers in academic medicine. Of the 125 fellows who have completed their renal training since 1973, 70 are academic physicians, of which 17 are full professors, 14 are associate professors, 23 are assistant professors, 10 are nephrology division chiefs, 2 are vice-chairpersons and 3 are associate deans.

Research

Our faculty members perform cutting-edge research in a wide variety of areas related to renal physiology and kidney disease. These activities encompass both laboratory, translational and clinical investigations. The range of topics under investigation include the pathophysiology and treatment of acute renal failure, the molecular mechanisms of cell injury and cell metabolism, regulation of ion transport and water excretion, mechanisms of muscle wasting and intracellular protein breakdown, preeclampsia, glomerular pathology, vascular leak, diabetic nephropathy, kidney fibrosis, and the genetic basis of kidney disease.

2009–2010 HIGHLIGHTS

In February 2010 Martin R. Pollak, MD, joined the Nephrology Division as the new Chief. A nationally renowned leader, trained clinician, and accomplished scientist, Dr. Pollak's research focuses on the genetics of glomerular diseases, and his work is leading to novel insights into the control of glomerular filtration and the pathways by which glomeruli are damaged. Also joining the Division of Nephrology, as a clinician and scientist is Johannes Schlondorff, MD, PhD. Dr. Schlondorff's research focuses on signaling in the glomerular podocyte.

Trypanosoma forms in a blood smear with the parasitic infection African trypanosomiasis. (CDC/Dr. Myron G. Schultz)

In 2010, Drs. David Friedman, Giulio Genovese, Martin Pollak and others published a paper in *Science* in which they show that coding sequence variants in the APOL1 gene explain the high rate of kidney disease in African Americans. These variants appear to have risen to high frequency in Africa because of the role they play in protecting against parasitic infection. This finding may lead to better diagnosis and treatment of a major cause of kidney failure.

SELECTED PUBLICATIONS

Wright S, Klausner D, Baird B, Williams ME, Steinman T, Tang H, Ragasa R, Goldfarb-Rumyantzev AS. Timing of dialysis initiation and survival in ESRD. *Clin J Am Soc Nephrol* 2010; 5:1828-35.

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RESEARCH FUNDING

	Direct	Indirect
Federal	1,449,876	600,267
Non Federal	643,771	57,783

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