

2018 Annual Report Division of Nephrology

DIVISION DESCRIPTION

The Division of Nephrology provides comprehensive care for children with all types of kidney disease.

We offer a complete range of renal replacement therapies for both acute and chronic renal failure, with successful transplantation the ultimate goal for children with kidney failure. We are internationally recognized experts in pediatric renal transplantation. We have been offering a novel prednisone-free immunosuppression option to our patients for over 15 years, giving our center one of the longest experiences in this area in the country.

Research interests include corticosteroid-free maintenance immunosuppression in pediatric kidney transplant patients; pediatric kidney stone risk factors; impaired growth associated with kidney failure; peritonitis and exit site infection rates and quality outcome measures in patients on home dialysis modalities; outcomes research in chronic kidney disease; and epidemiology and prevention of nephrotoxin-associated acute kidney injury, neonatal renal injury and renal outcomes, and treatment of inherited metabolic bone diseases.

2018 HIGHLIGHTS

• Sharon Bartosh, MD, was elected for the second time to the Organ Procurement and Transplantation Network (OPTN)/United Network for Organ Sharing (UNOS) Board of Directors as the medical/scientific organization representative. She will be representing the American Society of Transplantation.

Dr. Bartosh was also named an Editor-in-Chief of the journal *Pediatric Transplantation*, along with coeditor-in-chief Burkhard Tönshoff, MD, PhD, a Professor of Pediatrics at University Children's Hospital in Heidelberg, Germany.

- **Neil Paloian, MD,** was appointed to the International Society for Clinical Densitometry (ISCD) Scientific Advisory Committee, and was also named a pediatric faculty member of the ISCD.
- Medical student Brenna Funfar (mentor: Allison Redpath Mahon, MD) received a Shapiro Summer Research Award for the project, "Acute Kidney Injury in Pediatric Patients with Acute Myelogenous Leukemia."

Dr. Redpath Mahon also established (with colleagues in pediatric endocrinology and pediatric cardiology) the American Family Children's Hospital <u>Pediatric Metabolic Syndrome Clinic</u> to meet the needs of a growing cohort of children with obesity, hypertension, metabolic syndrome and hyperlipidemia.

- Co-principal investigator Michael Semanik, MD, MS, and principal investigator Joel Buchanan, MD (Medicine), received a \$50,000 UW Institute for Clinical and Translational Research (UW ICTR) Basic and Clinical Translational Research Pilot Grant for their project, "Evaluation of the Impact of a Problem Oriented View on Clinical Workflows." The project aims to demonstrate the impact of problem-oriented view (POV) on clinician efficiency, effectiveness, cognitive workload, and satisfaction in a simulation environment.
- In 2018, U.S. News and World Report ranked UW Health's American Family Children's Hospital in the top 50 children's hospitals for nephrology.

RECENT PUBLICATIONS

Furth SL, Pierce C, Hui WF, White CA, Wong CS, Schaefer F, Wühl E, Abraham AG, Warady BA; Chronic Kidney Disease in Children (CKiD); Effect of Strict Blood Pressure Control and ACE Inhibition on the Progression of CRF in Pediatric Patients (ESCAPE) Study Investigators (**Bartosh S**, collaborator). Estimating time to ESRD in children with CKD. *Am J Kidney Dis*. 2018 Jun;71(6):783-792. doi: 10.1053/j.ajkd.2017.12.011. Epub 2018 Apr 10. PubMed PMID: 29653769; PubMed Central PMCID: PMC5970998.

Selewski DT, Ambruzs JM, Appel GB, Bomback AS, Matar RB, Cai Y, Cattran DC, Chishti AS, D'Agati VD, D'Alessandri-Silva CJ, Gbadegesin RA, Hogan JJ, IDr.ragorri S, Jennette JC, Julian BA, Khalid M, Lafayette RA, Liapis H, Lugani F, Mansfield SA, Mason S, Nachman PH, Nast CC, Nester CM, Noone DG, Novak J, O'Shaughnessy MM, Reich HN, Rheault MN, Rizk DV, Saha MK, Sanghani NS, Sperati CJ, Sreedharan R, Srivastava T, Swiatecka-Urban A, Twombley K, Vasylyeva TL, Weaver DJ, Yin H, Zee J, Falk RJ, Gharavi AG, Gillespie BW, Gipson DS, Greenbaum LA, Holzman LB, Kretzler M, Robinson BM, Smoyer WE, Flessner M, Guay-Woodford LM, Kiryluk K; CureGN Consortium (**Bartosh S**, collaborator). Clinical characteristics and treatment patterns of children and adults with IgA nephropathy or IgA vasculitis: Findings from the CureGN study. *Kidney Int Rep.* 2018 Aug 3;3(6):1373-1384. doi: 10.1016/j.ekir.2018.07.021. eCollection 2018 Nov. PubMed PMID: 30450464; PubMed Central PMCID: PMC6224619.

Semanik M, Flynn JT. Value of routine screening for hypertension in childhood. In: Flynn JT, Ingelfinger JR, Redwine K, eds. *Pediatric Hypertension, 4th edition*. New York: Springer International Publishing; 2018.

Viswanathan A, Leffler T, **Paloian N**, Cain M, McKenna PH. Early transplantation into a vesicostomy: a safe approach for managing patients with severe obstructive lesions who are not candidates for bladder augmentation. *J Pediatr Urol*. 2018 Aug;14(4):332.e1-332.e6. doi: 10.1016/j.jpurol.2018.07.022. Epub 2018 Aug 8. PubMed PMID: 30228092.

*ePub only; no print citation available when report was compiled ** Publication had previously appeared in 2017 report as an ePub

GRANT SUPPORT

Principal Investigator	Sponsor	Title	Co-Investigators
Bartosh, Sharon M	National Institutes of Health (NIH) & Nationwide Children's Hospital	CureGN - Integrative proteomics & metabolomics for pediatric glomerula disease biomarkers	
Bartosh, Sharon M	Nephcure Kidney International & Nationwide Children's Hospital	NephCure kidney foundation - CureGN	
Bartosh, Sharon M	Raptor Pharmaceuticals & Emory University	Cystinosis: Clinical outcomes in a contemporary group of American patients	
Bartosh, Sharon M	National Institutes of Health (NIH) & Children's Mercy Hospitals and Clinics	Chronic kidney disease in children (CKiD)	
Paloian, Neil J	Relypsa	A phase 2, open-label, multiple dose study to evaluate the pharmacodynamic effects, safety, and tolerability of patiromer for oral suspension in children and adolescents 2 to < 18 years of age with chronic kidney disease and hyperkalemia	