Publications from the NEPTUNE Consortium

Updated September 11, 2017

1. Gadegbeku CA, Gipson DS, Holzman L, et al. Design of the Nephrotic Syndrome Study Network (NEPTUNE) to evaluate primary glomerular nephropathy by a multi-disciplinary approach. Kidney international. 2013;83(4):749-756. doi:10.1038/ki.2012.428

2. Barisoni L, Nast CC, Jennette JC, et al. Digital Pathology Evaluation in the Multicenter Nephrotic Syndrome Study Network (NEPTUNE). Clin J Am Soc Nephrol. 2013;8:1449-1459. PMID: 23393107. PMCID: PMC3731905

3. Sampson M & Juppner H. Genes, Exomes, Genomes, Copy Number: What is The Future in Pediatric Renal Disease? Curr Pediatr Rep. 2013;1:52-59. DOI: 10.1007/s40124-012-0001-5

4. Wickman L, Afshinnia F, Wang SQ, et al. Urine Podocyte mRNAs, Proteinuria, and Progression in Human Glomerular Diseases. J Am Soc Nephrol. 2013;24(12):2081-2095. PMID: 24052633, PMCID: PMC3839551

5. Hogan M, Johnson K, Zenka R, et al. Subfractionation, characterization, and in-depth proteomic analysis of glomerular membrane vesicles in human urine. Kidney International. 2014;85:1225–1237; doi:10.1038/ki.2013.422. PMID: 24196483, PMCID: PMC4008663

6. Canetta PA, Kiryluk K, Appel GB. Glomerular Diseases: Emerging Tests and Therapies for IgA Nephropathy. Clin J Am Soc Nephrol. 2014;9(3):617-625; doi: 10.2215/CJN.07260713 PMID: 24071652

7. Moeller S, Canetta PA, Arguelles C, et al. Lack of Serologic Evidence to Link IgA Nephropathy with Celiac Disease or Immune Reactivity to Gluten. PLoS One. 2014;9(4):e94677. doi: 10.1371/journal.pone.0094677; PMCID: PMC3986214

8. Spinale J, Mariani L, Kapoor S, et al. A reassessment of soluble urokinase-type plasminogen activator receptor in kidney disease. Kidney International. 2015;87:564–574. doi:10.1038/ki.2014.346, PMID: 25354239, PMCID: PMC4344842

9. Sampson MG1, Hodgin JB, Kretzler M. Defining nephrotic syndrome from an integrative genomics perspective. Pediatr Nephrol. 2015 Jan;30(1):51-63; quiz 59. doi: 10.1007/s00467-014-2857-9

10. Nast CC, Lemley KV, Hodgin JB, et al. Morphology in the Digital Age: Integrating High-Resolution Description of Structural Alterations With Phenotypes and Genotypes. Semin Nephrol. 2015 May;35(3):266-78. doi: 10.1016/j.semnephrol.2015.04.006

11. Kikuchi M, Wickman L, Hodgin J, Wiggins RC. Podometrics as a potential clinical tool for glomerular disease management. Semin Nephrol. 2015 May; 35(3): 245–255. doi:10.1016/j.semnephrol.2015.04.004

12. Hogan MC, Lieske JC, Lienczewski C, et al. Strategy and Rationale for Urine Collection Protocols Employed in the NEPTUNE Study. BMC Nephrol. 2015 Nov 17;16:190. doi: 10.1186/s12882-015-0185-3

13. Ju W, Nair V, Smith S, et al. Tissue transcriptome-driven identification of epidermal growth factor as a chronic kidney disease biomarker. Sci Transl Med. 7(316), 2015, DOI: 10.1126; PMID: 26631632, NIHMS779671

14. Gipson D,Troost J, Lafayette R, et al. Complete Remission in the Nephrotic Syndrome Study Network. Clin J Am Soc Nephrol. 2016 Jan 7;11(1):81-9. doi: 10.2215/CJN.02560315

15. Ng DK, Robertson CC, Woroniecki RP, et al. APOL1-associated glomerular disease among African American children: A collaboration of the Chronic Kidney Disease in Children (CKiD) and Nephrotic Syndrome Study Network (NEPTUNE) cohorts. Nephrol Dial Transplant. 2016 Apr 27. pii: gfw061

16. Rosenberg AZ, Palmer M, Merlino L, et al. The Application Of Digital Pathology To Improve Accuracy in Glomerular Enumeration In Renal Biopsies. PLoS One. 2016 Jun 16;11(6):e0156441. doi: 10.1371/journal.pone.0156441

17. C. E. Gillies, E. A. Otto, V. Vega-Warner, et al. tarSVM: Improving the accuracy of variant calls derived from microfluidic PCR-based targeted next generation sequencing using a support vector machine strategy. BMC Bioinformatics. 2016 Jun 10;17(1):233. doi: 10.1186/s12859-016-1108-4

18. Sampson MG, Robertson CC, Martini S, et al. Nephrotic Syndrome Study Network. Integrative genomics identifies novel associations with APOL1 risk genotype in Black NEPTUNE subjects. J Am Soc Nephrol. 2016 Mar;27(3):814-23. doi: 10.1681/ASN.2014111131

19. Haas, ME, Levenson, AE; Sun X, et al. The Role of Proprotein Convertase Subtilisin/Kexin Type 9 in Nephrotic Syndrome-Associated Hypercholesterolemia. Circulation. 2016 Jul 5;134(1):61-72. doi: 10.1161

20. Sampson M, Gillies C, Robertson C, et al. Using population genetics to interrogate the monogenic nephrotic syndrome diagnosis in a case-cohort. J Am Soc Nephrol. 2016 Jul;27(7):1970-83. doi: 10.1681/ASN.2015050504

21. Barisoni L, Troost J, Nast C, et al. Reproducibility of the NEPTUNE descriptor-based scoring system on whole-slide images and histologic and ultrastructural digital images. Mod Pathol. 2016; Jul;29(7):671-84. doi: 10.1038/modpathol.2016.58

22. Hogan MC, Reich HN, Nelson PJ, et al. The relatively poor correlation between random and 24-hour urine protein excretion in patients with biopsy-proven glomerular diseases. Kidney Int. 2016 Aug 12. pii: S0085-2538(16)30309-X. doi: 10.1016/j.kint.2016.06.020

23. Pedigo CE, Leclercq F, Ducasa GM, et al. Local rather than systemic TNF causes NFATc1-dependent cholesterol-mediated podocyte injury. *J Clin Invest.* 2016. doi:10.1172/JCI85939

24. Lemley KV, Bagnasco SM, Nast CC, et al. Morphometry Predicts Early GFR Change in Primary Proteinuric Glomerulopathies: A Longitudinal Cohort Study Using Generalized Estimating Equations. PLoS One. 2016; 11(6): e0157148

25. Crawford B, Gillies CE, Robertson CC, Kretzler M, Otto E, Vega-Wagner V, Sampson MG. Evaluating Mendelian nephrotic syndrome genes for evidence for risk alleles or oligogenicity that explain heritability. Pediatr Nephrol 2017, Mar;32(3):467-476. doi: 10.1007/s00467-016-3513-3. Epub 2016 Oct 20.

26. Hladunewich MA, Beanlands H, Herreshoff E, Troost JP, Maione M, Trachtman H, Poulton C, Nachman P, Modes MM, Hailperin M, Pitter R, Gipson DS. Provider perspectives on treatment decision-making in nephrotic syndrome. *Nephrol Dial Transplant* (2017) 32 (suppl_1): i106-i114. DOI: https://doi.org/10.1093/ndt/gfw309.

27. Beanlands H, Maione M, Poulton C, Herreshoff E, Hladunewich MA, Hailperin M, Modes MM, An L, Nunes-Wright J, Trachtman H, Nachman P, Gipson DS. Learning to live with nephrotic syndrome:

experiences of adult patients and parents of children with nephrotic syndrome. Nephrol Dial Transplant (2017) 32 (suppl_1): i98-i105. DOI: https://doi.org/10.1093/ndt/gfw344.

28. Mariani LH, Martini S, Barisoni L, Canetta PA, Troost JP, Hodgin JB, Palmer M, Rosenberg AZ, Lemley KV, Chien HP, Zee J, Smith A, Appel GB, Trachtman H, Hewitt SM, Kretzler M, Bagnasco S. Interstitial fibrosis scored on whole-slide digital imaging of kidney biopsies is a predictor of outcome in proteinuric glomerulopathies. *Nephrol Dial Transplant* (2017) 1–9doi:10.1093/ndt/gfw443.

29. Barisoni L, Gimpel C, Kain R, Laurinavicius A, Bueno G, Caihong Z, Zhihong L, Schaefer F, Kretzler M, Holzman LB, Hewitt SM. Digital pathology imaging as a novel platform for standardization and globalization of quantitative nephropathology. *Clin Kidney J* (2017) sfw129 DOI: https://doi.org/10.1093/ckj/sfw129.

30. Sethna CB, Meyers KEC, Mariani LH, Psoter KJ, Gadegbeku CA, Gibson KL, Srivastava T, Kretzler M, Brady TM. Blood Pressure and Visit-to-Visit Blood Pressure Variability Among Individuals with Primary Proteinuric Glomerulopathies. *Hypertension* (2017) Aug;70(2):315-323. doi: 10.1161/HYPERTENSIONAHA.117.09475. Epub 2017 Jun 26.

31. Barisoni L, Hodgin JB. Digital pathology in nephrology clinical trials, research, and pathology practice. *Curr Opin Nephrol Hypertens* (2017) Aug 30. doi: 10.1097/MNH.0000000000000360. [Epub ahead of print].