

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF PEDIATRICS AND COMMUNICABLE DISEASES

Matthew G. Sampson, M.D., assistant professor of pediatrics and communicable diseases, Department of Pediatrics and Communicable Diseases, Medical School, is recommended for promotion to associate professor of pediatrics and communicable diseases, with tenure, Department of Pediatrics and Communicable Diseases, Medical School.

Academic Degrees:

M.S.	2011	University of Pennsylvania
M.D.	2005	Virginia School of Medicine
B.S.	2000	Duke University

Professional Record:

2013-present	Assistant Professor of Pediatrics and Communicable Diseases, University of Michigan
2011-2013	Clinical Lecturer, Department of Pediatrics and Communicable Diseases, University of Michigan

Summary of Evaluation:

Teaching: Dr. Sampson's enthusiasm for learning is contagious. He is a dedicated and passionate teacher that enjoys sharing his knowledge with all that are fortunate to cross his path. From high school students to fellows, Dr. Sampson has something to share with all levels of learners. He created a yearly lecture "How I Became a Pediatric Nephrologist" for high school students attending a computational biology summer camp on the university's main campus and a weekly division conference for Pediatric Nephrology. Dr. Sampson was the recent recipient of the "Faculty Award for Notable Contributions to the Pediatric Educational Mission" for his esteemed residency morning report series "Chat with Matt." In addition to didactic teaching, Dr. Sampson engages residents and fellows in teaching activities while he is an attending on the inpatient service in C.S. Mott Children's Hospital and in the outpatient clinics. He also actively mentors undergraduates, graduate students, post-doctoral fellows and medical students in his laboratory.

Research: Dr. Sampson has had funding from a variety of sources including the prestigious Carl Gottschalk Award from the American Society of Nephrology, a National Institutes of Health (NIH) K08 award, and an NIH R01 as the principal investigator. His individual focus has been in nephrotic syndrome (NS), a kidney disease resulting from damage to the filtration units of the kidney, focusing on using integrative genomics to discover the genetic drivers of this disease and to characterize their biologic mechanisms and clinical consequences. Dr. Sampson has used statistical genetics and bioinformatics to increase our greater understanding of Mendelian- and APOL1- associated NS. Through his laboratory's efforts it was discovered that African American children with the APOL1 variant were at a significantly higher-risk for pre-mature birth. Additionally, Dr. Sampson is the co-chair the Genomics Working Group of two multi-center studies, the Nephrotic Syndrome Study Network (NEPTUNE) and the Cure Glomerulopathies Network (CureGN). Overall, Dr. Sampson has 31 peer-reviewed publications, 26 in rank (11 as first, senior or co-author). Additionally, he has given

numerous national and international talks (17 extramural invited presentations in the past three years) including those for the National Kidney Foundation, the American Society of Nephrology Annual Meeting and the 17th Congress of the International Pediatric Nephrology Association.

Recent and Significant Publications:

Gillies CE, Robertson CC, Sampson MG*, Kang HM*: GeneVetter: a web tool for quantitative monogenic assessment of rare diseases. *Bioinformatics* 31:3682-3684, 2015. *Co-corresponding author.

Ng DK, Robertson CC, Woroniecki RP, Limou S, Gillies CE, Reidy KJ, Winkler CA, Hingorani S, Gibson KL, Hjorten R, Sethna CB, Kopp JB, Moxey-Mims M, Furth SL, Warady BA, Kretzler M, Sedor JR, Kaskel FJ, Sampson MG*: 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. PM27190333.

Sampson MG*, Gillies CE, Robertson CC, Crawford B, Vega-Warner V, Otto EA, Kretzler M, Kang HM.: Using Population Genetics to Interrogate the Monogenic Nephrotic Syndrome Diagnosis in a Case Cohort. *Journal of the American Society of Nephrology* 27:1970-1983, 2016.

Sampson MG*, Robertson CC, Martini S, Mariani LH, Lemley KV, Gillies CE, Otto EA, Kopp JB, Randolph A, Vega-Warner V, Eichinger F, Nair V, Gipson DS, Cattran DC, Johnstone DB, O'Toole JF, Bagnasco SM, Song PX, Barisoni L, Troost JP, Kretzler M, Sedor JR: Nephrotic Syndrome Study Network.: Integrative genomics identifies novel associations with APOL1 risk genotypes in Black NEPTUNE subjects. *Journal of the American Society of Nephrology* 27: 814-823, 2016.

Crawford BD, 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* 32:467-476, 2017.

Service: Dr. Sampson sees patients in the outpatient clinic at C.S. Mott Children's Hospital one half-day per week and serves as an attending on the inpatient floor six to eight weeks per year. He specializes in nephrotic syndrome and congenital abnormalities of the kidneys and urinary tract (CAKUT). Due to his research background, colleagues consult with questions about potential diagnostic genetic testing and to utilize his laboratory. Since 2013, Dr. Sampson has served as a core faculty advisor for the residency program and core interviewer. Additionally, he has served as an invited guest editor for the *American Society of Nephrology*. Dr. Sampson has sat as a grant reviewer on several study sections including for the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) R01 Study Section (Special Emphasis Panel) in 2015 and NIDDK X01 Study Section in 2016. He has also acted as an ad hoc reviewer for top-tier journals such as *PLoS One*, the *New England Journal of Medicine* and the *Journal of the American Society of Nephrology*.

External Reviewers:

Reviewer A: "Matt has achieved a remarkable level of scholarly impact in a relatively short period of time... Among the reports he has published as a senior author, one that stands out as extremely impactful is the one in which his group identified novel associations between APOL1 variants and prematurity (*Journal of the American Society of Nephrology*, 27(3): 814-23, 2016); this expanded our

knowledge of the potential health impact of these variants, which is most relevant in the African-American community...He is clearly on a trajectory to become an international leader in pediatric nephrology and nephrotic syndrome.”

Reviewer B: “Dr. Sampson’s scholarly activity is judged as outstanding....Of special note, the majority of his independent publications are recent, indicating a flurry of productive research activity and more to come....Dr. Sampson is now **recognized** as a leading figure in the genetics of nephrotic syndrome and glomerular disease **nationally** and **internationally**....His scientific career trajectory predicts continuous success.”

Reviewer C: “Dr. Sampson has already developed national and international recognition as a clinician-investigator....I think Dr. Sampson is a rising star in pediatric nephrology who is positioning himself to be a true thought leader at the nexus between genetics and glomerular disorders, particularly those that affect children. He would certainly meet the criteria for promotion at my institution.”

Reviewer D: “Specifically, he has established a national and even international reputation for scholarship based on a consistent production of peer-reviewed research papers published in high level journals including the New England Journal of Medicine, Journal of Clinical Investigation, and Journal of the American Society of Nephrology....those of us in the field who are familiar with the work, recognize Dr. Sampson’s essential contributions....At a time when there is a paucity of pediatric nephrologists engaged in high level translational research, it is truly heartwarming to witness the emergence of someone with Dr. Sampson’s talents, commitment and accomplishments.”

Reviewer E: “One of Dr. Sampson’s critical contributions to the literature is analysis of how physicians and researchers should interpret genetic testing data for nephrotic syndrome in the general population in the US....He is well-positioned to continue to leverage his skills and access to national cohorts and their associated genetic and transcriptomic data to continue to make important contributions for years to come....He has demonstrated creative and substantial scholarly productivity, has achieved national recognition of his work, has been successful in obtaining extramural funding and has engaged in educational and organization activities to support this recommendation.”

Summary of Recommendation:

Dr. Sampson is a superb mentor and productive scholar. He has created a unique niche in his research and is making notable contributions to his field. He is highly regarded by his peers and serves the university with distinction. I enthusiastically support Matthew G. Sampson, M.D. for promotion to associate professor of pediatrics and communicable diseases, with tenure, Department of Pediatrics and Communicable Diseases, Medical School.



Marschall S. Runge, M.D., Ph.D.
Executive Vice President for Medical Affairs
Dean, Medical School

February 1, 2018

Martin A. Philbert, Ph.D.
Provost and Executive Vice President for Academic Affairs
3075 Fleming

Subject: Matthew G. Sampson, M.D., Assistant Professor, Empl. ID: 43343421 Date of Hire: 07/01/2011

Dear Martin:

I would like to recommend Matthew G. Sampson, M.D. for promotion to Associate Professor, with tenure, in the Department of Pediatrics and Communicable Diseases. Dr. Sampson received his M.D. degree in 2005 from the University of Virginia and an M.S. in 2011 from the University of Pennsylvania. From 2005 to 2008 he completed a pediatric residency, followed by a fellowship in pediatric nephrology from 2008 to 2011, both at the Children's Hospital of Philadelphia. Dr. Sampson was appointed as Clinical Lecturer in the Department of Pediatrics and Communicable Diseases in 2011 and as Assistant Professor in 2013. This is his fifth year in rank.

Dr. Sampson *teaches* at the interface of genetics and clinical medicine to students at all levels, from high school students participating in a bioinformatics camp to senior-level fellows. He developed a monthly conference for pediatric residents that has come to be known as "Chat with Matt." This series has garnered him the "Faculty Award for Notable Contributions to the Pediatric Educational Mission." Scores for his medical student and resident teaching are in the high 4s (out of 5) with many positive comments. There were a few negative comments pointing to his "rigid" style but even these learners acknowledged his commitment to and enthusiasm for teaching. He has mentored three graduate students, two medical students and six fellows.

Dr. Sampson's *investigative work* derives from using genetics, epidemiology and bioinformatics methods to determine the prevalence and clinical implications of Mendelian forms of nephrotic syndrome, discovering the biological consequences and epidemiology of APOL1 associated nephrotic syndrome in African American children, and properly integrating genomic testing in the clinical arena. He has been credited with leading high impact studies that demonstrated a lower than expected prevalence of Mendelian Nephrotic Syndrome in the U.S. when more stringent methods of genetic epidemiology (developed by his lab) were employed in population based studies. His work is described by peer reviewers as translational and impactful. His laboratory has developed innovative statistical and bioinformatics methods to study the genetics of Mendelian- and APOL1-associated NS. Particularly cited by his external reviewers is an impactful report showing that African American children with the APOL1 variant were at

February 1, 2018

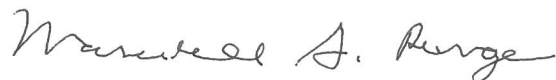
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significantly higher risk for having had pre-mature birth. Evidence of research productivity includes 31 peer-reviewed articles and a solid funding record including a Carl Gottschalk Award from the American Society of Nephrology, a NIH K08 award. His current funding includes principal investigator on a NIH R01 and co-investigator on one industry grant and one foundation grant. His funding is consistent and based upon a thematic and likely sustainable niche in an important area of pediatric kidney disease. His ability to collaborate within and across institutional boundaries has also allowed him to be co-investigator on several pending grants. He has been invited to present his research on 17 occasions regionally, nationally and internationally.

Dr. Sampson's organizational *service* includes participating as an ad hoc member of several study sections including the Medical Research Council of South Africa, the UK Medical Research Council, and L'Agence Nationale del la Recherche, France. Nationally, he has served on the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) R01 Study Section (Special Emphasis Panel) in 2015 and NIDDK X01 Study Section in 2016. He has been an ad hoc reviewer for *PLoS One*, the *New England Journal of Medicine*, the *Journal of the American Society of Nephrology*. Locally, he serves as a resident advisory and core interviewer for the Pediatrics Residency Program. His clinical activity at the C.S. Mott Children's Hospital includes one half-day per week in the outpatient clinic and service as an attending 6-8 weeks per year. He specializes in nephrotic syndrome and congenital abnormalities of the kidneys and urinary tract (CAKUT).

Dr. Sampson has demonstrated sustained productivity and made valuable contributions to clinical care, teaching, and organizational service. His laboratory has developed computational tools that not only advanced his own work, but have contributed to the investigative efforts of other researchers and consortia, and supported the career development of trainees. His skill set and productivity have gained the praise of external reviewers who predict continued success and academic leadership for him. The Advisory Committee for Appointments, Promotions and Tenure (ACAPT) voted 6-0-1 in support of the promotion to Associate Professor and the granting of tenure. The one abstention was due to departmental affiliation. The Medical School's Executive Committee was also supportive of the proposed promotion and granting of tenure by a unanimous vote of 12-0-0.

Sincerely,



Marschall S. Runge, M.D., Ph.D.

Dean, U-M Medical School

Executive Vice President

for Medical Affairs