

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF INTERNAL MEDICINE

Laura H. Mariani, M.D., M.S.C.E., assistant professor of internal medicine, Department of Internal Medicine, Medical School, is recommended for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, Medical School.

Academic Degrees:

M.S.	2012	University of Pennsylvania
M.D.	2005	University of Michigan Medical School
B.A.	2001	Harvard University

Professional Record:

2015-present	Assistant Professor of Internal Medicine, University of Michigan
2012-2019	Research Scientist, Arbor Research Collaborative for Health
2012-2015	Clinical Lecturer of Internal Medicine, University of Michigan

Summary of Evaluation:

Teaching: Dr. Mariani instructs learners across various environments including research project mentorship, mentorship committees, classroom instruction, national and international instruction through CME activities and invited presentations, and she has several leadership positions in the area of clinical instruction. Learners include undergraduates, graduate students, post-doctoral fellows, medical students, residents, clinical fellows, and other mentees. She has particularly devoted herself to the training of medical students and nephrology fellows. Dr. Mariani serves as a faculty member in the Chief Concern Course in the medical school curriculum and she has also given several lectures on renal sequence, the internal medicine clerkship, and an elective course on comparative physiology. She serves as the assistant program director for the Nephrology Fellowship Program which entails designing the didactic curriculum, matching fellows to research mentors, and giving lectures. Nationally, she serves as the glomerular disease faculty at the annual American Society of Nephrology Board Review Course where she interacts with graduating fellows and practicing clinicians across the country to update them on recent guidelines, studies, and essentials of glomerular disease practice. Dr. Mariani's dedication and excellence in teaching was recognized in 2020 when she was awarded the Kaiser Permanente Excellence in Pre-Clinical Teaching, the most prestigious teaching award given by the Medical School.

Research: Dr. Mariani's primary research focus is on linking complex clinical data to novel biomarkers and high-dimensional omics data to better understand disease mechanisms that can be targeted for therapy in glomerular disease. To this end, she is involved in several clinical and translational studies in kidney disease and has built an enormous collaborative network of multi-disciplinary scientists who work together to address fundamental questions in rare and common kidney diseases. Dr. Mariani has an excellent track record of securing research support. She currently serves as a co-investigator on 13 grants/clinical trials of which several are NIH-funded, with others sponsored via the Department of Defense, and private/industry sources. Two of her

active grants are ancillary R01 projects of the Cure Glomerulonephropathy (CureGN) study which Dr. Mariani considers to be one of her most important contributions to the field of glomerular disease. Additionally, she recently submitted a related R01 as a co-investigator that received an impact score of nine, further speaking to the immense value of the existing clinical and genetic data accumulated by CureGN and Dr. Mariani's consistent success with procuring funding. She has authored 52 peer-reviewed publications in high-impact journals including the *American Journal of Kidney Disease*, the *Clinical Journal of the American Society of Nephrology*, and *Kidney International*. Dr. Mariani has presented her work both nationally and internationally, most recently providing extramural invited presentations at the Renal Pathology Society Meeting, presenting at Duke University Grand Rounds, and providing a virtual presentation at the World Congress of Nephrology.

Recent and Significant Publications:

Zee J, Liu Q, Smith AR, Hodgins JB, Rosenberg A, Gillespie BW, Holzman LB, Barisoni L, Mariani LH, "Kidney Biopsy Features Most Predictive of Clinical Outcomes in the Spectrum of Minimal Change Disease and Focal Segmental glomerulosclerosis," *Journal of the American Society of Nephrology* Epub May 2022. PMID 35581011.

Sealfon R*, Mariani LH* (shared first), Avila-Casado C, Nair V, Menon R, Funk J, Wong A, Lerner G, Hayashi N, Troyanskaya O, Kretzler M, Beck LB, "Molecular Characterization of Membranous Nephropathy," *Journal of the American Society of Nephrology* Epub April 2022. PMID 35477557.

Smith AR, Zee J, Ji N, Troost JP, Gillespie BW, Nair V, Liu Q, Gibson KL, Kretzler M, Mariani LH, "Estimated GFR Trajectories in Pediatric and Adult Nephrotic Syndrome: Results from the Nephrotic Syndrome Study Network (NEPTUNE)," *Kidney Medicine* June 2020. PMID32775980.

Mariani LH, Bomback AS, Canetta PA, Abbott K, Flessner MF, Helmuth M, Hladunewich MA, Hogan JJ, Kiryluk K, Nachman PH, Nast C, Rheault MN, Rizk DV, Trachtman H, Wenderfer SE, Bowers C, HillCallahan P, Marasa M, Poulton CJ, Revell A, Vento S, Barison L, Cattran D, D'Agati V, Jennette JC, Klein JB, Laurin L-P, Twombly K, Falk RJ, Gharavi AG, Gillespie BW, Gipson DS, Greenbaum LA, Holzman LB, Kretzler M, Robinson B, Smoyer WE, Guay-Woodford LM on behalf of the CureGN Consortium. CureGN Rationale, Design and Methods, "Establishing a Large Prospective Observational Study of Glomerular Disease," *American Journal of Kidney Disease* November 2018. PMID 30420158.

Mariani LH, Martini S, Barisoni LB, Canetta PA, Troost JP, Hodgins JB, Palmer M, Rosenberg AZ, Lemley KV, Chien HP, Zee J, Smith A, Appel GB, Trachtman H, Hewitt SM, Kretzler M, Bagnasco SM, "Interstitial fibrosis scored on whole slide digital imaging of kidney biopsies is a predictor of outcome in proteinuric glomerulopathies," *Nephrology, Dialysis and Transplantation* February 2017. PMID: 28339906.

Service: Dr. Mariani has an excellent institutional, national, and international service record. Institutionally she is the assistant program director of the Nephrology Fellowship, also serving on the clinical competency committee and program committee, and the assistant clerkship director for Internal Medicine Clerkship. Nationally, she recently served as the co-chair for the Kidney Health Initiative Focal Segmental Glomerulosclerosis (FSGS) Surrogate Outcome working group, and the externally led patient-focused drug development sponsored by the Federal Drug Administration, National Kidney Foundation and Nephcure Kidney International.

Dr. Mariani is currently on the editorial board of three journals, the *American Journal of Kidney Disease*, *Kidney 360*, and as an associate editor of *Glomerular Diseases*. She performs ad hoc peer-reviews for seven journals and serves on the Society of Nephrology program committee.

Dr. Mariani is an outstanding physician whose clinical training and expertise have prepared her well for independence as a clinician specializing in glomerular disease epidemiology. She is thorough and thoughtful in caring for her patients and has been recognized by NephCure Kidney International, a patient advocacy foundation, as a Nephrotic Syndrome Specialist. In addition to her own patients, she works in the bi-weekly glomerular disease referral clinic which receives patients from across the region and allows Dr. Mariani and three other colleagues to discuss complicated second opinions and interact with nephrologists outside of the University of Michigan.

External Reviewers:

Reviewer A: “She is the PI and Co-I on numerous federal and industry sponsored grants that seek to expand knowledge around the pathogenesis of glomerular disease thereby advancing the quest for novel therapeutics...She is a sought after speaker at local, regional, national and international conferences and published >50 peer reviewed manuscripts. Her work is very impactful and includes seminal studies on defining novel histopathologic subtypes predictive of clinical outcomes in minimal change disease and focal segmental glomerulosclerosis and the molecular characterization of membranous nephropathy.”

Reviewer B: “...has gained a national reputation for excellence in furthering the understanding of many aspects of kidney diseases...She has been extremely well supported with external funding for her research, particularly from the NIH...Dr. Mariani is a standout among her peers, with excellence in quality and quantity of her research that will improve the care of patients with kidney disease. I have no doubt that she will continue to be an excellent physician-scientist in the future.”

Reviewer C: “...she has been a faculty member [of the American Society of Nephrology’s Board Review Course] for the last 4 years. When it comes to invitations for teaching, nothing ranks higher than to be part of this course. This is an honor, and she has been a vital part of our glomerular disease teaching faculty. I cannot speak highly enough about her contributions to the course and what an important international stage this is for her to be on. She is a gifted lecturer...Her clinical research history is very impressive; being a coinvestigator or PI of many important glomerular clinical trials. The number of clinical trials she has been involved with in her academic career is extremely impressive.”

Reviewer D: “Dr. Mariani has embraced team science. This is reflected nicely in her excellent funding track record. While she has projects for which she is a solo PI, she puts considerable research effort into consortia where she works as a team member toward answering important questions in nephrology. It is clear that in the current environment of omics bioinformatics and other high-throughput technologies, impactful breakthroughs will come through team science efforts. This is even seen in the funding paradigms favored by the NIH and certainly the NIDDK.”

Reviewer E: “Remarkably, in addition to her scholarly contributions and scientific achievements, Dr. Mariani has had a substantial institutional impact too. I am especially impressed that she is the Assistant Program Director for the Nephrology Fellowship, Assistant Clerkship Director of the Internal Medicine Clerkship, and that she lectures in comparative physiology and teaches clinical reasoning in the preclinical years...She has received national recognition for her scientific work, she has contributed to and been an office bearer in national organizations, and she has played a substantial role as a lecturer and teacher both locally and nationally.”

Summary of Recommendation:

Dr. Mariani is nationally recognized as a leading expert in the field of glomerular diseases and biomarkers. Her teaching, research, and clinical work have all been cited as a part of her national reputation. Dr. Mariani has continued to make great advances in her field and has proven herself as a leader both within our institution as well as within the national nephrology and translational research community. Therefore, I am pleased to recommend Laura H. Mariani, M.D., M.S.C.E. for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, Medical School.



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

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