

April 9, 2020

Paul B. Rothman, M.D.
CEO, Johns Hopkins Medicine
Dean of the Medical Faculty,
Johns Hopkins University School of Medicine
Administration, Suite 100

Dear Dr. Rothman:

It is with great pleasure that I nominate with the utmost enthusiasm Duvuru Geetha, MD for promotion to the rank of Professor of Clinical Medicine in the Division of Nephrology on the basis of her nationally recognized clinical excellence and clinical scholarship. Dr. Geetha is a master clinician in the service of patient care, acting as both a mentor and a role model for trainees and professional colleagues. Her efforts to build the vasculitis center program and her continued scholarship in the field of vasculitis make her an excellent outstanding candidate for promotion to the rank of Professor of Clinical Medicine.

Overview

Dr. Duvuru Geetha attended medical school in Madras, India and completed her house-staff training in both India and the United Kingdom prior to immigrating to the United States. After completing a residency in Internal Medicine at York Hospital in York, Pennsylvania, Dr. Geetha completed a fellowship in Nephrology at the Johns Hopkins Bayview Medical Center. Due to her outstanding performance as a fellow, Dr. Geetha was appointed as an Instructor in the Division of Nephrology in 1998 and subsequently as an Assistant Professor in 2001. She was promoted to Associate Professor in 2014. As a Clinician with distinction for outstanding clinical skills, Dr. Geetha's scholarship, teaching, and leadership in two focused areas of nephrology, namely BK virus nephropathy and renal vasculitis have brought her well-deserved local, national and international recognition. Her work in these areas is innovative, far-reaching, and of high quality. A full time clinician and nephrologist at the Johns Hopkins Vasculitis Center, Dr. Geetha has continued her relentless effort to improve outcomes of patients with vasculitis across Johns Hopkins Medicine, as well as nationally and internationally. Her substantial clinical expertise has been a significant driver in building the Johns Hopkins Vasculitis Center database and collaboration in pivotal multi-center research studies. The rationale that has prompted the decision to put forth her promotion to Professor of Clinical Medicine include: (i) her acknowledged role as a master clinician in the service of patient care, and as a mentor and role model for trainees and professional colleagues; (ii) her efforts to build the vasculitis center database; and (iii) her continued scholarship in the field of vasculitis.

Clinical Excellence and Effort

Dr. Geetha is a consummate patient centered clinician whose sharp observations across the vasculitis population with renal disease have moved the field forward. Dr. Geetha's full time clinical responsibilities serve as the context for her well-rounded efforts and accomplishments, all of which are ultimately focused on patient care. She has two half-day clinics at the Johns Hopkins Bayview campus. Additionally, she precepts the Fellows' Nephrology Clinic in the Division of Nephrology. Given

the rapidly progressive nature of vasculitis and need for timely treatment initiation, she has often seen

patients at additional times during the week to assure timely patient access to care. Since 1998, her attending responsibilities have averaged five months on the nephrology consult service at the Johns Hopkins Bayview Medical Center.

Her multidisciplinary approach has evolved across the medical school departments and divisions, and includes important collaboration with non-medical providers. As the epitome of the 'clinician with distinction', Dr. Geetha focuses not only on kidney function, but also on the maintenance of quality of life and wellness over time. For the past 22 years, Johns Hopkins has led the world in the care of patients with vasculitis, a rare auto-immune disease affecting multiple organs. Timely diagnosis and treatment initiation is of utmost importance to decrease morbidity and mortality. **The Johns Hopkins Vasculitis Center** has successfully managed over 1000 patients using a combination of drugs, most of which were developed at Johns Hopkins. More than 50% of these patients over the past year have travelled to Hopkins from other parts of the country to receive this unique care.

Dr. Geetha spends (redacted)% of her effort in providing direct patient care in both inpatient and outpatient settings. She spends (redacted)% of time teaching renal and rheumatology fellows with a focus on improving diagnostic accuracy and providing personalized patient care.

Clinical Performance and Contributions

Program Building

Early in her career at Johns Hopkins Bayview Medical Center, Dr. Geetha was instrumental in expanding the Hopkins Nephrology presence in community practice at White Marsh by starting a longitudinal renal clinic and at the Franklin Square Hospital where she attended on the renal consultative service for 8 out of 12 months. Her early experience was built on understanding patient needs and building relationships. Dr. Geetha joined the Johns Hopkins Vasculitis Center in 2005. She brought her experience to the vasculitis center and it informed the process of building a collaborative multidisciplinary renal vasculitis clinic. Her role has been to help with the early diagnosis of renal involvement by vasculitis and provide timely treatment. She has evaluated many patients who have lost their kidney function due to vasculitis and improved their access to renal transplantation. The Transplant Registry at Johns Hopkins had 9 patients transplanted from 1999-2005. Dr. Geetha's focused care of these patients in the vasculitis center has increased the number of transplanted vasculitis patients; most of these have been pre-emptive transplants, occurring without subjecting the patients to dialysis. Dr. Geetha has reported excellent graft and patient survival rates among these transplanted vasculitis patients. More recently, Dr. Geetha has been instrumental in starting the Johns Hopkins Glomerular Disease clinic which is a collaborative effort between the members of the Divisions of Nephrology and Renal Pathology at Johns Hopkins University. This specialized clinic which is fully operational now seeks to provide outstanding and personalized clinical care while seeking to better define the cause, natural history and targeted treatment approaches for glomerular disease.

Leadership and Quality Improvement

Dr. Geetha served as Medical Director of Davita White Square dialysis unit from February 2005 to June 2009. From 2009 to 2016, Dr. Geetha served as Medical Director for the Davita JB Zachary Triad Dialysis Unit and the White Square Peritoneal Dialysis Unit. Since 2016, Dr. Geetha serves as Medical Director for the Fresenius Fleet Street Dialysis Unit. As the Dialysis Medical Director, she leads in group decision-making, in analyzing core processes and patient outcomes and in stimulating a team approach to Continuous Quality Improvement (CQI) and patient safety. She oversees all policies and procedures and takes a leadership role in developing requirements of education and performance by

the medical staff, including hiring of medical staff and, when necessary, counseling members of the medical staff. This dialysis unit has consistently ranked top in the region and has exceeded national average for dialysis quality metrics.

Dr. Geetha is involved in increasing awareness of vasculitis through her work with the Vasculitis Foundation. She is a consultant for the Vasculitis Foundation and guides patients and physicians in the diagnosis and treatment of vasculitis. She has lectured at national and international vasculitis patient care symposia, aiming to educate patients on early detection of renal vasculitis and treatment options. She represents the Vasculitis Foundation at the ASN Kidney Health Initiative and is an active member in projects focused on glomerular diseases.

Recognition of Clinical Excellence

Dr. Geetha's professional excellence, integrity and empathy in care of these patients has been recognized both at Hopkins and on a national and international level.

Dr. Geetha's status as a master clinician was substantiated with her induction into the **Miller-Coulson Academy of Clinical Excellence**. Dr. Geetha became a member of the Miller Coulson Academy of Clinical Excellence (MCACE) in 2010. After being nominated for the Academy membership by many peers, Dr. Geetha was invited to apply. Like all nominees, Dr. Geetha constructed her 26 page clinical portfolio, designed to assess clinical performance, contributions, and leadership. The framework for the portfolio also includes institutional data used to assess productivity relative to MGMA targets, and draw by examining the proportion of patients coming from a distance and from out of state to see Dr. Geetha. Twenty four referees (6 each of patients, physician-peers, nurses, and learners) contributed to a '360 degree' evaluation that assessed Dr. Geetha across the 8 domains of clinical excellence, as defined by the MCACE. There was consensus that her portfolio was outstanding and she was an exceptional clinician. External reviewers, professors at other top academic institutions, evaluated the portfolio. These individuals were selected because they were judged by our Hopkins Chairs to be clinical experts in their fields on a national level. These external reviewers were asked to assess each section of the portfolio with our evaluation tool, give an overall score to the portfolio, and make a recommendation about whether the candidate should be offered membership in the Academy. Next, the MCACE members convene to review all applicants under consideration and each candidate / portfolio is assigned a *primary reviewer* who summarizes the person being considered and presents the input of the external reviewers, a *'con' reviewer* who highlights shortcomings or weaknesses in the portfolio, and a *'pro' reviewer* who presents the merits of the candidate. A discussion, with the ability to ask clarifying questions, takes place about each applicant. At the end of the meeting, a confidential vote is taken with each member of the MCACE getting to vote on every candidate. There was unanimous consensus that Dr. Geetha should be offered membership in the MCACE. Since joining the Academy, Dr. Geetha has been an important contributor helping with the Academy achieve its goal to promote and highlight clinical excellence at Hopkins for the benefit of the patients that we serve. It is believed that the rigorous process described above unequivocally establishes Dr. Geetha as a 'clinician with distinction' and one who is categorically clinically excellent. Because this achievement has been described in Hopkins' Gold and Silver books to be deserving of promotion when combined with other accomplishments even in the traditional promotion track, it is hoped that this accomplishment carries the day in the *clinical excellence promotion track*.

Dr. Geetha has taken on the most medically complex patients in the country and provides a level of expert care that prompted her colleagues to nominate her for the 2019 **American Society of Nephrology Mid-Career Award for Distinguished Clinical Service**; Dr. Geetha was selected as the **inaugural recipient** of this award. Dr. Geetha has actively participated in the development of consensus statements focusing on renal transplant candidacy for ANCA vasculitis patients.

Engagement in the Teaching Mission and Mentorship

Dr. Geetha has made significant and valuable contributions to the education of medical learners at many levels. Presently, Dr. Geetha serves as an attending physician on the renal consult service (1998-present)

and nephrology fellow clinic preceptor (1998-present). In these roles her teaching is always very highly rated (average rating for all evaluation questions 3.85 out of a maximum of 4 in e*value). Learners have commented on her professionalism, compassion, excellent bedside teaching, and communication skills. Her additional teaching roles within the fellowship program include education on outpatient hemodialysis and peritoneal dialysis experience where she directly supervises the fellows during these rotations.

Dr. Geetha started a renal clinic at the Johns Hopkins Vasculitis Center in 2005 and developed a renal vasculitis curriculum for the renal fellows; this curriculum is used during their rotation in the second year of fellowship and is highly rated by the nephrology fellows. Dr. Geetha has served as a mentor for fellows in their vasculitis related research projects and her involvement in all these activities highlights her passion for teaching. Dr. Geetha is also an active participant in the rheumatology core curriculum lectures and gives lectures on the renal aspects of rheumatic disease to the rheumatology fellows. Dr. Geetha strives to always provide patient centered care and helps patients assess their goals. She has trained a whole generation of young physicians who are now practicing in academic centers and community practices around the country, emulating her fineness of character, values, and practice, thereby creating a ripple effect that potentially benefits thousands of patients.

Engagement and Contributions to the JHM Research and Discovery Mission

The Vasculitis Center at Johns Hopkins has built a world-renowned framework for discovering the mechanisms, causes and therapies for vasculitis. The cornerstone of this approach involves providing comprehensive, longitudinal patient care, and at the same time collecting and storing clinical data and patient samples. To enable coupling this exceptional data and sample resource to patients, Dr. Geetha started a longitudinal database in 2015. The longitudinal database allows us to observe outcomes among patients with many different forms of systemic vasculitis, who we follow for many years. In addition to collecting detailed clinical information, she has been collecting blood and urine samples at each visit. The center now has the unique capacity to fuel translational research by providing clinical data and tissue specimens from expertly phenotyped patients, completing a number of projects. Dr. Geetha has authored peer-reviewed manuscripts describing outcomes of vasculitis patients enrolled in this database. Dr. Geetha participates in multi-center clinical trials in vasculitis and was a co-investigator in the RAVE trial, which led to the approval of rituximab for treatment of ANCA vasculitis. She is currently the site principal investigator for ADVOCATE, a clinical trial investigating the use of a novel agent to control ANCA vasculitis activity.

Publications, Presentations and Other Communications Disseminating Clinical Excellence

Evidence of Dr. Geetha's innovation, collaboration, and impact through scholarship is evident in her publication record. Dr. Geetha's H index is 21 reflecting 3715 citations with 11 of her publications exceeding 50 citations. She has focused her work in BK virus nephropathy in renal transplant recipients and renal vasculitis.

Dr. Geetha's early work focused on BK virus nephropathy in renal transplant recipients. In 1970, a new Polyoma virus was detected in a renal transplant patient who presented with acute renal failure. The virus was later named with the initials of the patient as BK virus. While these viruses are typically found in young children, they rarely result in any morbidity and it was not until 2002 when multiple reports emerged on the increased risk of renal transplant graft loss in patients infected with this virus.

While the virus was clearly identified, little was known regarding the possible risk factors for infection. In 2007, Dr. Geetha reported in the journal *Transplantation* that the routine practice of placing a ureteral stent at the time of kidney transplant predisposed patients to develop BK nephropathy. This

article changed both the number of patients who received a ureteral stent and the duration that they remained in-situ.

Building on this work, Dr. Geetha answered a critical question as to safety and efficacy of re-transplanting patients whose primary kidney transplant had failed, secondary to infection of BK virus. Her report from six US centers documented for the first time the safety of re-transplanting these patients and paving the way for patients infected with this virus to be re-transplanted.

In 2011, Dr. Geetha answered another very important question. While it was known that reduction in immunosuppression could decrease viral replication, this was frequently at the expense of increased graft loss, secondary to repeat episodes of rejection. The prevailing practice at this time was to either decrease all immunosuppressive medications or decrease two of the three medications while eliminating the third. This latter strategy drastically increased the risk of rejection due to minimization of immunosuppression. Dr. Geetha's study showed that moderate reduction of all three medications was as efficacious as eliminating one of the medications, while reducing the immunosuppression of the remaining two medications. This study, once again, changed routine practice allowing the patient to remain on three immunosuppressive medications and balancing immunosuppression versus infection.

Finally in the area of BK virus and renal transplant, Dr. Geetha was a key mentor to a renal transplant fellow in reporting for the first time, the incidence and outcome of BK virus nephropathy in patients who underwent ABO or incompatible renal transplants, a group of transplant patients who were the most highly immunosuppressed.

Dr. Geetha's second area of interest that has brought her national and international recognition is in the area of renal vasculitis. Clinically, Dr. Geetha has established herself as a regional, national and international authority in treating patients with renal vasculitides. She is the sole member of the Division of Nephrology with a practice in the Johns Hopkins Vasculitis Center and has become a marquee physician for this center. Because of her large patient base in this very rare and specialized area, Dr. Geetha was recruited to be one of two nephrologists in the world to participate in the RAVE Research Group, an international group of rheumatologists and nephrologists who study vasculitis. Through this collaborative effort, two major papers were published in the *New England Journal of Medicine* on the management of ANCA vasculitis. These two papers and a third, which was published in the *Arthritis and Rheumatism* have changed the standard of care internationally in the management of these disorders. Through collaboration with the RAVE Research Group, Dr. Geetha analyzed the renal outcomes of vasculitis patients and presented her findings at the annual American Society of Nephrology Meeting in 2012. She also published a paper in the *Journal of the American Society of Nephrology*. She is currently the site principal investigator for ADVOCATE, a phase 3 trial of novel complement blocker for induction therapy in ANCA vasculitis.

Utilizing her large cohort of patients followed in the Vasculitis Center, and while mentoring fellows conducting research in these diseases, Dr. Geetha has reported additional key findings in patients with renal vasculitides. All of these findings were published in top tier nephrology or rheumatology journals.

Perhaps the area that Dr. Geetha has distinguished herself the most is as the content expert in the area of recurrent or de-novo vasculitis in patients who have received a renal transplant. Dr. Geetha has described the outcome of ANCA associated vasculitis patients who underwent renal transplantation for their end stage renal disease at both the Johns Hopkins and national cohorts. In addition, Dr. Geetha reported on the use of a novel agent, rituximab, as the appropriate treatment in recurrent ANCA associated glomerulonephritides in post-renal transplant patients. She has been invited to write reviews on the topic of renal transplantation in vasculitis in many peer-reviewed journals.

Dr. Geetha's expertise in BK virus nephropathy and renal vasculitis is evident in her leadership and recognition at the national level. She has been an abstract reviewer for BK virus session for the annual American Transplant Society Meeting for several years. She served as co-chair for the clinical Polyoma session of the American Transplant Society Meeting in 2013. She has been an invited breakout session speaker at the International Vasculitis Symposium multiple times. She was invited to give updates on the treatment of renal vasculitis at the spring meeting of National Kidney Foundation and at the American Society of Nephrology Kidney Week meetings. Due to her expertise in renal vasculitis, she was invited to be a medical consultant for the vasculitis foundation. The Vasculitis Foundation is an International organization for patients with vasculitis, their family, friends and health care providers who care for them. The Vasculitis Foundation medical consultants are recognized authorities in the medical community. Dr. Geetha does consultations by phone on complicated vasculitis patients across the United States. Her national reputation is evidenced by her broad referral pattern throughout the United States, her participations in international multicenter trials, and for her content leadership at national and international meetings.

In recognition of her expertise in BK virus nephropathy and renal vasculitis, Dr. Geetha is regularly invited to review submissions to high impact journals including the *Journal of the American Society of Nephrology*, *American Journal of Transplantation*, *Transplantation*, *Medicine*, *Clinical Rheumatology*, *Seminars in Arthritis and Rheumatism*, *Nephrology*, *Dialysis and Transplantation* and *Transplant International*. As you can see from Dr. Geetha's CV, she is frequently called upon for her expertise in renal vasculitis to provide educational material for rheumatology and nephrology texts.

Dr. Geetha has served as a member of the American Society of Nephrology's Post Graduate Education Committee for the glomerular disease section. This committee is responsible for the content of the clinical and translational session at the Kidney Week. She has also been invited to co-chair sessions at the American Society of Nephrology Kidney Week sessions devoted to vasculitis and glomerular diseases. She has been a faculty participant for the Standardized outcomes in nephrology, glomerular disease workshop (SONG-GD). She was invited to be speak on the pathogenesis and prognosis of ANCA vasculitis at the Kidney Disease Improving Global Outcomes (KDIGO) clinical practice conference this year. Dr. Geetha has been invited to serve on the scientific committee for the International ANCA workshop in 2021.

Contributions to JHM Initiatives and/or Committees

Dr. Geetha has given generously of her time and expertise to institutional committee work. She has been an active member of the Pharmacy and Therapeutics Committee at JHBMC as well as an active member of Medical Advisory Board of National Kidney Foundation of Maryland since 2000. She has also been involved in educational activities of NKF, Maryland. Since 2012, she has been the medical director for the KEY screening program of the National Kidney Foundation of Maryland. She has been on the Johns Hopkins Medical School Admissions Committee since 2014 and her responsibilities have included screening applications and interviewing and selection of medical school candidates. She has served on the search committee for Handler chair in nephrology and for recruitment of nephrology faculty and fellows.

Summary

Dr. Geetha is an outstanding nationally and internationally recognized Clinician and scholar with distinction in areas of BK virus nephropathy and renal vasculitis and a deserving candidate for promotion to Professor of Clinical Medicine. While her deep humility, and generosity of spirit does not permit her to boast, her work has influenced many patients, learners, and colleagues in novel and meaningful ways. The impact of her scholarship in these areas has had an important impact at our own institution and on a national and international level as evidenced by her publications and leadership roles. Her publications have been in high impact journals and have had national and international impact in changing practice. Dr. Geetha's accomplishments and importance as a faculty role model cannot be

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overstated given her clinical commitments as noted in her CV and her clinical productivity. I nominate Dr. Geetha with the utmost enthusiasm.

Sincerely,

Mark E. Anderson, MD, PhD
William Osler Professor of Medicine
Director, Department of Medicine