March 15, 2019

Georgia Clinical & Translational Science Alliance: TL1 Program

Emory University

Dear Committee Members,

It is with great enthusiasm as I serve as an advisor for Anish Shah’s submission for the TL1 award and the Master of Science in Clinical Research (MSCR). Anish has excelled clinically and is passionate in his study of neurocardiology, combining his technical skills with his interest in the relationship between cardiovascular epidemiology and neuropsychological pathology. After joining Emory for his internal medicine residency training, he has continued to pursue research opportunities within the Emory Program in Cardiovascular Outcomes Research and Epidemiology (EPICORE). Even through his residency training, Anish has worked on several projects with members of the mentorship team, and has shown a dedication and clinical curiosity that are hallmarks of his potential to become an outstanding clinical researcher.

I believe that I am well suited to serve as an advisor for Anish as part of his mentoring team as he works to develop the research training needed to become a clinical investigator. I am a leading cardiovascular epidemiologist with international recognition for my work on cardiovascular disease epidemiology and prevention, and social, behavioral and psychological determinants of cardiovascular disease, and have published over 270 peer-reviewed research publications. Since joining Emory University in 2000 I have been continuously funded by the NIH. At Emory I currently serve as the Chair of the Epidemiology Department at the Rollins School of Public Health, where I also oversee the doctoral program in epidemiology, and I hold the Wilton Looney endowed chair in cardiovascular research. Furthermore, I have a joint appointment at the School of Medicine (Cardiology), and am a member of several other teaching and mentoring programs at Emory. Finally, I am a project leader and member of the steering committee of P01 HL 101398, and PI of R01 HL109413, as well as the Emory Twins Study upon which Anish’s latest manuscript on heart rate variability and myocardial ischemia is based upon.

Perhaps my most important qualification to serve as an advisor in Anish’s application is my commitment and passion towards mentoring. Throughout my career, I have dedicated a large part of my time to mentoring PhD students, post-doctoral fellows and junior faculty members. Many of my mentees have obtained career development awards or individual fellowship grants from the NIH, the AHA and other venues under my mentorship. Additionally, several of my trainees have received prestigious national awards for their work. For example, Jinying Zhao, a junior faculty member whom I had recruited to work in my team, won the Elizabeth-Barrett Connor Award for Young Investigators at the AHA Scientific Sessions in 2006. Jun Dai, a PhD student, won the Jeremiah and Rose Stamler Research Award for New Investigators at the AHA Conference on CVD Epidemiology and Prevention in 2008. Susmita Parashar, then a junior faculty in General Medicine, won the Trudy Bush Award for CVD Research in Women’s Health in 2007 at the same conference. Many of my trainees have pursued successful academic careers as independent investigators. Noteworthy, I was the lead mentor for Dr. Amit Shah for his MSCR, successful KL2 and K23 grants, and whom I recruited to join as an Assistant Professor in the Department of Epidemiology at Rollins. Dr. Amit Shah is now serving as one of Anish’s lead mentors for the TL1 award, which underscores my commitment to the training of future clinical investigators and the importance of mentoring teams that have strong relationships, which will ultimately benefit Anish as he develops his academic career.

Anish currently works on several projects within EPICORE, including his most recent first-author paper entitled “Circadian Changes in Heart Rate Variability Predict Abnormal Myocardial Perfusion”, for which his research was chosen as a top-poster at a recent American Heart Association conference and that I am a co-author on. He is also working with his other lead-mentor, Dr. Alvaro Alonso, on a manuscript studying heart rate variability and psychosocial stress in the Atherosclerotic Risk in Communities cohorts. His TL1 research proposal, wherein he will study the relationship of a new HRV index *Dyx*, with obstructive coronary disease, depression, and cognitive impairment, is an excellent step-wise progression of his prior work, and will help to establish his research interest in autonomic dysfunction and cardiovascular risk-stratification. The MSCR will further enhance and formalize this training.

As an advisor to Anish for his TL1, I will provide a number of training opportunities within EPICORE and the T32 (“Multidisciplinary Research Training to Reduce Inequities in Cardiovascular Health”). Our lab has biweekly meetings which Anish will attend and allow him to discuss his work, as well as hear about the ongoing research of other PhD, masters, and post-doctoral fellows, as well as progress in larger faculty projects. He will learn methodologies related to study recruitment, database management, problem solving, data analysis and interpretation, and study planning. He will also attend series on cardiovascular epidemiology and health disparities by invited speakers, meet with other trainees, and attend dedicated teaching programs in vascular biology and biostatistics. More directly, I have already established a relationship with Anish through his manuscript on *Dyx* and ischemic heart disease, and I will continue to give him direct feedback as he develops his manuscript, focusing on teaching him biostatistical and epidemiological concepts.

In summary, Anish is a top candidate for the TL1 award who will greatly benefit from not only the formal didactics of the MSCR, but the application of those skills through dedicated research time. With the support of an outstanding multidisciplinary mentoring team, I have no doubts that Anish will be successful on his path to become a clinical and translational researcher.

Sincerely,

Viola Vaccarino, MD, PhD

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