June 10, 2024  
AHA Scientific Sessions Early Career Awards  
Letter of Reference

To the Selection Committee and the Council on Epidemiology and Prevention:

It is with great pleasure that I write to you in strong support of Dr. Anish S. Shah, MD, MS, for the Elizabeth Barrett-Connor Research Award in Epidemiology and Prevention.

As an Associate Professor in the Department of Epidemiology at the Rollins School of Public Health, Emory University, I have extensive experience in cardiovascular disease epidemiology, psychosocial factors, and health disparities. My research is funded by NIH, and I currently hold two active R01 awards. Over the past decade, I have mentored numerous early career investigators, many of whom have secured prestigious grants and academic positions. I have known Anish since 2016, from when he began his internal medicine residency to now, as he is completing his cardiology fellowship and beginning his training in electrophysiology. Throughout this time, I have served as his mentor for various stages of his career, including his NIH-TL1 and NIH-F32 fellowships. Our collaborative relationship has been marked by numerous research projects and publications, reflecting his dedication and growth as a researcher. Notably, I will continue to support him as a mentor for his upcoming NIH-K23 application. These experiences make me well-suited to assess and support Anish’s candidacy for this award.

Anish’s research interest in computational neurocardiology and autonomic mechanisms of arrhythmogenesis has been consistent and focused. He has developed skills in biostatistics, signal processing, and advanced programming, which he further refined during his Master’s degree and research with the EPICORE group at Emory University. His unique skill set positions him at the intersection of epidemiology and electrophysiology-oriented digital signal processing.

During his postdoctoral research fellowship and clinical training, Anish has published three first-author papers, including his Master’s dissertation. These publications have focused on electrocardiographic markers of autonomic dysfunction, demonstrating his keen understanding of heart rate variability and ECG-based morphology parameters. Anish’s background in biostatistics also led to his significant contribution to a middle-authorship paper published in JAMA in 2021, for which he performed core recurrent event analyses.

Under my mentorship, Anish has become technically proficient in programming languages such as R, MATLAB, and Python, and has utilized the PhysioNet software suite for his research. He has written and published software for multiphase cosinor/harmonic regressions, showcasing his innovative approach and technical expertise. His productivity during his T32 and F32 fellowships has been impressive, with two novel first-author papers recently submitted on autonomic reactivity to stress and genetic components of atrial flutter.

Anish’s current project aims to identify psychosocial and contextual factors that may impact patient reported outcomes. He is leveraging his training in epidemiology to best understand how social determinants may influence AF burden, through both mechanism-based pathways to the systematic and implicity biases that may occur in physician-patient interactions. This project forms the core of his K23 application and highlights his ability to integrate large-scale data analysis with clinical research. His approach to combining ECG-based feature extraction, genetic analyses, and epidemiology-informed mechanisms demonstrates his forward-thinking and innovative research mindset.

In summary, I wholeheartedly support Dr. Anish Shah’s application for the Elizabeth Barrett-Connor Research Award. He is a bright, passionate researcher with great potential for a successful career in academic medicine. His unique combination of skills in epidemiology, biostatistics, and programming, along with his dedication to addressing health disparities, make him an outstanding candidate for this award. Please do not hesitate to reach out to me at ajshah3@emory.edu or 215-840-3960 should you have any further questions regarding his qualifications.

Sincerely,

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