December 8, 2019

F32 Awards Review Committee National Heart, Lung, and Blood Institute, National Institutes of Health

Dear Committee Members.

I am pleased to write you to support Anish Shah, MD for his application for the F32 award. I am enthusiastic about serving as an advisor and collaborator for his further training. I met Anish in 2018 as he began his first manuscript on autonomic dysfunction and am most impressed by his potential to become an outstanding clinical researcher in the field of neurocardiology and epidemiology. He has a distinct passion for studying the autonomic nervous system, understanding mechanisms, and has grown tremendously in the time that I have known him. He will complete the TL1 grant and receive a Master of Science in Clinical Research this year, and the F32 will be fundamental on his accelerated path towards becoming an independent clinical researcher.

I have worked on several projects with Anish, including a manuscript under review that demonstrated the relationship of autonomic dysfunction (measured by abnormal heart rate variability through the marker Dyx), was predictive of abnormal myocardial perfusion imaging and coronary flow reserve. The complex math behind the Dyx variable is conceptually intriguing. It captures additional information about sympathovagal balance that is less prominent with traditional HRV. Noteworthy is that Anish has a familiarity with the mathematical concepts at play due to his computational background, which places him in the rare position of being able to find clinical meaning in the mathematical abstractions he is studying.

I have an extensive background as a clinical investigator in the area of the autonomic nervous system and its regulation of cardiac physiology. As his advisor, I will support him by providing field-specific expertise, critical writing feedback, and dedicated meeting time. This serves as a continuation of my current mentorship for Anish. We will meet monthly in person, and biweekly through phone. Part of our time will be focused on improving his understanding of the complexity of cardiovascular reflexes. We will discuss relevant literature and how this relates to his current proposal, such as potential mechanisms behind how both depression and coronary artery disease can lead to changes in autonomic function, both acutely and chronically. I will also coach him on his scientific writing. I have given him feedback on his manuscripts and grant applications, and by providing further constructive criticism, I believe he will mature as a developed scientific writer.

In summary, I support Dr. Anish Shah in his application for the F32 award. He will benefit tremendously not only from the protected research time, but also developing his background in computer programming and statistics by building on the MSCR with advanced, topic-specific coursework. I have worked with his sponsors and know that this collaborative environment will be fundamental to his development. I have no reservations about Anish's success during his fellowship. He is an ideal candidate and will become a promising clinical researcher.

Sincerely,

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