

Department of Neurological Surgery

505 Parnassus Avenue, M779 San Francisco, CA 94143

tel: 415.353.7500 fax: 415.353.2889

weill.ucsf.edu neurosurgery.ucsf.edu April 1, 2025

To the Selection Committee:

It is my pleasure to write this strong recommendation letter in support of Dr. Ramin Morshed and his colleague, Dr. Madhumita Sushil, in regards to their submission for the Artificial Intelligence / Machine Learning Demonstration Projects 2025. Dr. Morshed is an Assistant Professor within the UCSF Department of Neurological Surgery, is a clinical faculty member in goodstanding, and will have the necessary protected time for the research project. Dr. Sushil is a collaborator on the proposal and is an Assistant Professor in the Division of Clinical Informatics and Digital Transformation (DoC-IT) - Department of Medicine, Department of Neurological Surgery, and the Bakar Computational Health Sciences Institute (BCHSI). Dr. Sushil has additional expertise in the development of LLMs and plans to also provide guidance on model training, development, and implementation.

Dr. Morshed has cultivated a research background in the field of surgical management of brain tumors and has a clinical practice focused on brain tumor management. As he outlines in the proposal, many of these brain tumors are slow growing lesions including meningioma, vestibular schwannomas, and pituitary adenomas. These tumors often require long periods of follow-up, sometimes for years, with ongoing risk of neurological morbidity. Follow-up compliance is critical, yet remains a logistic challenge. There is a need for novel methods to improve imaging follow-up for patients with brain tumors. The foundation of this proposed platform can also potentially be applied for other incidental lesions including vascular lesions that often require follow-up. More broadly, this adaptive platform could be useful across specialties to aid in follow-up compliance with visits. Application towards brain tumors however is a feasible first-step approach.

I recommend you strongly consider this proposal for the award as it will provide for a clinically useful and meaningful model and is a feasible project within the time-frame specified by the grant stipulations. Dr. Morshed and Dr. Sushil have the expertise to see the project through. Please feel free to contact me with any additional questions.

Sincerely,

Edward Chang, M.D.

Joan and Sanford I. Weill Chair of the Department of Neurological Surgery Jeanne Robertson Distinguished Professor Weill Institute of Neurosciences University of California, San Francisco

