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April 4th, 2025

To the AI/ML Demonstration Projects Review Committee,

I am writing this letter in strong support for the proposal entitled "A Multimodal Foundation Model for Enhanced Prostate Cancer Care at UCSF Health". This project is co-led by Mansour Abtahi, Dr. Peder Larson, and myself. I am a Professor in Residence in the Department of Radiology and Biomedical Imaging in the Abdominal Imaging and Nuclear Medicine sections at the University of California San Francisco (UCSF). I serve as Vice Chair of Clinical Operations and Strategy. I also serve as the Director of Molecular Therapy, Chief of Nuclear Medicine at the San Francisco VA Medical Center and as chair of the Cancer Center's Molecular Imaging & Radionuclide Therapy Site Committee. I led the development and FDA approval of Ga-68 PSMA-11 PET imaging, and there is an unmet need to merge the data coming from imaging with EMR and genomics data to better inform clinicians on prognosis.

This project aims to develop a multimodal AI foundation model that integrates PET, CT, MRI, and clinical data to enhance prostate cancer diagnosis, treatment planning, and outcome prediction. This goal is admittedly a bit broad, but this application is the first step in attempting to bridge the gap between these diverse data types within the institution.

Mansour Abtahi brings extensive expertise in deep learning, computer vision, and multimodal AI models, making him well-suited to co-lead this effort. His collaboration with Dr. Larson, a leading expert in advanced PET/MRI imaging and AI applications, ensures both the technical and clinical feasibility of this project. Together, we are committed to developing, validating, and integrating AI models into the APeX EHR system, aligning with UCSF's broader vision for AI-driven precision medicine.

I fully support this initiative and look forward to seeing the approach be implemented. Although admittedly ambitious, it is important to move forward to attempt to use the advances in artificial intelligence to further patient care.

Sincerely,

Thomas Hope, M.D. Professor in Residence Department of Radiology and Biomedical Imaging University of California, San Francisco Cell: 650-575-6506