[Your letter head and UTSW logo here; Please include your position in the loo as well.]

Dear Colleagues,

To Whom It May Concern

As Dr. Ogunmolu's former co-doctoral advisor at UT Southwestern Medical Center, I am writing to strongly recommend Dr. Ogunmolu’s application for this K99/R00 award. Dr. Ogunmolu has a unique educational background that combines basic scientific training in physics with the practical impact of control, electronics and robotics, which is predictive of his achieving success as an independent investigator. Under the mentorship of Drs. Wiersma, Pikul, Turner, and Pappas, he can mature as a scientist and engineer as well as seek the proper source of mentorship (given the resources available to him at UPenn and other partner universities) as the needs arise for the next phase of his career. His mentoring team believes he has the right motivation and capabilities to become an independent faculty and scientist and I am firmly in agreement with them. I am a Diplomate of the American Board of Radiologist (DABR), a fellow of the AAPM and a fellow of the Institute of Physics (IOP) which make me an expert on the leading research problems in medical physics today. I have carefully read his research plan and based on my own evaluation of his abilities. I am unreservedly in support this application. This K99 grant will strongly position him as a preferred candidate in his prospective search for a faculty job. Dr. Ogunmolu is an excellent researcher as his plethora of academic publications and diverse research activities show. His assembled K99 mentors have outstanding research achievements that would provide him with an excellent training as an independent researcher.

I would now describe Dr. Ogunmolu's work when he was under my supervision. As the soft robot project’s principal investigator when he was a doctoral student at UT Dallas, I can confirm Dr. Ogunmolu's important role on this project. Working on this study, Dr. Ogunmolu was instrumental in the development and build of the 3-DoF soft robot motion correction mechanism. After conception, he was responsible for the hardware procurement, system design and build, control systems synthesis, and computer vision development. He regularly consulted with us, the medical physics partners on the project to be sure he carefully executed clinical system requirements and specifications. After finishing the 3-DoF design and development on this project, he joined my lab full-time at UT Southwestern on the classical beam orientation optimization (BOO) problem. The goal on the BOO problem was to find a fast means of solving the classical non-convex BOO problem. Together with my postdocs and fellow students, his teamwork spirit was evident in his instrumental work that calculated fluence-based dose calculations for anonymized patient data for use by our research group. He also developed an approximate dynamic programming formulation for solving this BOO problem. His contributions have significantly driven our research forward at the Medical Artificial Intelligence and Automation (MAIA) lab which I direct. His work has resulted in multiple publications by our research group including disseminations at "Medical Physics: The International Journal of Medical Physics Research and Practice", the Algorithm Foundations of Robotics Workshop (WAFR), which is the foremost robotics venue for disseminating theoretical algorithm contributions to robotics in the world, and Physics in Medicine and Biology among others. Of these, Lekan was a first author on the WAFR paper and a second author on our Medical Physics paper. Other than these, his name has appeared in other presentations at the American Association of Physicists in Medicine (AAPM) and the workshop on artificial intelligence in radiation therapy's lecture notes in computer science series.

Dr. Ogunmolu is a qualified, and capable researcher in his own right as his past publications, collaborations and assembled mentoring team shows. Given his multidisciplinary research skills and diverse industry experience (he has previously interned at Amazon Robotics and Preferred Networks in Tokyo), I am sure he is uniquely positioned to execute the goals he has outlined this proposal. I strongly recommend him for this award. It will help unlock the potential benefits of successfully executing the goals in this line of research inquiry. The proposed robot compensation mechanism will also help democratize the availability of MRI-LINAC RTs to cancer patients everywhere as simultaneous imaging and irradiation become mainstream in radiation oncology treatment centers.

Thank you!

[Your Signature here]

Steve Jiang, PhD