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04162021

RE: Brain Innovation and Technology Park (BITP)
Initiative

Dear Dr. Kateb:

I am a Professor of Electrical Engineering Department at UCLA with joint adjunct appointments in the Biomedical Engineering Department and the Department of Surgery at the UCLA Geffen School of Medicine. I'm the Director of the Photonics Laboratory at UCLA (www.photonics.ucla.edu) engaged in R&D on laser based instruments for biomedicine and industrial applications. My laboratory has pioneered ultrafast microscopy and its integration with artificial intelligence for cancer detection and biofuel development, a work that is documented in a recent book titled, [Artificial Intelligence powered microscope for identification of biological cells](#). This book expands on the journal paper we published last year that has been viewed online about 40,000 times making it one of the most popular papers in the history of the journal Nature Scientific Reports. My lab is also the pioneer of the world's fastest fluorescent biomedical imaging technology which was spun off into a startup called Omega Biosystems. Earlier this year, Omega was acquired by BD Biosciences the global leader in blood analysis systems.

The purpose of this letter is to express my unqualified support for the proposed Brain Innovation and Technology Park (BITP). Future breakthroughs in medicine will increasingly come from collaborations between researchers with complementary skills. BITP will create a research network spanning universities, companies, and government labs. The network will bring to bear recent breakthroughs in brain imaging and nanotechnology to find treatment and cure for brain disorders that plague millions of Americans. These technologies have shown the promise of accelerating recovery and improving rehabilitation and the quality of life.

As you know, the Center has ambitious but realistic goals. It will find solutions for key healthcare problems facing veterans and wounded soldiers. In doing so, it will create jobs through investment in research and creation of spinoffs from its R&D. The Center will improve healthcare efficiency and cost-effectiveness through advances in stem cell therapy,

nanotechnology, and rehabilitative devices to address the most urgent needs of wounded soldiers. To maximize the investments already made by federal and state governments, BTIP aims to create a clearinghouse through which technologies already developed by federally employed engineers, scientists, and researchers can be brought to bear for treatments for neurological recovery.

California has long been a technological leader in biotechnology, electronics, and software. The BITP provides a cost-effective mechanism to maintain leadership in these vital fields, while advancing technological horizons. The most important aspect of the BTIP is to create a clearinghouse through which technologies already developed by federally employed engineers, scientist and researchers can be made available to specific research facilities or services for development and commercialization of new treatments for neurological recovery.

We hope that you will share and support this ambitious vision.

Sincerely,



Bahram Jalali, Ph.D.
Professor and Northrop-Grumman Chair
UCLA EE Department
Adjunct Professor, Biomedical Engineering Department
Adjunct Professor, Department of Surgery, UCLA Geffen School of Medicine

CC: Babak Kateb, MD, Founding Chairman of the Board of Society for Brain Mapping and Therapeutics (SBMT), President of Brain Mapping Foundation, Scientific Director and Chief Strategy Officer (CSO) of California Neurosurgical Institute and Director of National Center for NanoBioElectronics.