2. CANDIDATE'S BACKGROUND

Professional Experience. My interest in HIV prevention and care began while I was a research associate at The Fenway Institute for a study to elucidate HIV care retention factors. We found that, among 495 HIV-infected (HIV+) patients, predictors of loss-to-follow-up included minority race/ethnicity and the use of safety-net insurance. [1] I remained at Fenway to coordinate a randomized controlled trial of a cognitive-behavioral intervention for improving adherence to antiretroviral therapy (ART) among HIV+ men who have sex with men (MSM). [2] My experience working with HIV+ MSM propelled me to pursue graduate training to understand racial/ethnic disparities in HIV among MSM.

Graduate Training. I obtained my doctoral training at the University of Connecticut (UConn), where I was a fellow in a NIMH-funded institutional T32 traineeship. The traineeship combined an intensive doctoral program in social and health psychology with a mentored community research experience. I was trained not only in classic social/health psychological theories and methods, but also in how to apply them to understanding multilevel processes involved in HIV risk. My dissertation utilized theories and methods in social and health psychology to examine HIV-risk behavior among a group of racial/ethnic minority men who have sex with men (MSM), for which I was funded by the National Science Foundation. This work incorporated an electronic daily "diary" event-sampling method that introduced me to using technology-based methods to study how daily processes may be related to event-level sexual and drinking behavior to produce racial HIV disparities. [3]

Postdoctoral Training. I decided to pursue a postdoctoral fellowship at UCSF's Traineeship in AIDS Prevention Studies (TAPS), a NIMH-funded T32 postdoctoral fellowship at the Center for AIDS Prevention Studies (CAPS) that would expose me to developing HIV prevention interventions for addressing racial disparities in HIV. At CAPS, I have collaborated with world-renown HIV/AIDS researchers that led to first-authored publications. [4,5] I have also become interested in working with a particularly at-risk population, Black MSM, among whom increases in HIV incidence have been concentrated. My interest in HIV disparities among Black MSM was piqued by evidence that individual-level risk factors such as having unprotected anal sex and multiple sexual partners do not explain the disparate rates in HIV. Instead, researchers have increasingly pointed to dyadic level factors wherein characteristics of the sexual partners (e.g., HIV serostatus, infectiousness, viral load [VL]) may play an important role in HIV disparities among Black MSM. Accordingly, I have become keenly interested in the primary partnership as a context of HIV-risk and intervention among Black MSM. Along with my interest in using emergent technologies in research, I am eager to incorporate strategies such as (but not limited to) mobile health technology into HIV prevention interventions targeting partnerships. The dyad may represent an important context for effecting behavioral improvements in HIV care, and using mobile technology to facilitate and enhance couple level dynamics (e.g., HIV-specific social support) is innovative, and potentially efficient and effective. [6-10]

Need for further training under K01. My training in social/health psychological theory and research methods, along with my background as an immigrant, racial and sexual minority, and a first-generation college graduate, provide unique insights in conducting research with marginalized populations with specific needs for interventions attuned to their cultural contexts. **My postdoctoral experience has highlighted gaps in my training towards my long-term career goal to become an independent investigator in developing innovative HIV prevention interventions to reduce racial/ethnic disparities in HIV-related outcomes.** Toward this goal, I am proposing to develop a couple-based intervention with HIV+ Black MSM using mobile health strategies to improve HIV care and treatment outcomes. I recognize that I lack training in several areas: (1) While I am well-versed in social and health psychological theories pertaining to individuals and groups, I do not have the theoretical knowledge base for conducting research in intimate relationships and partnership dynamics; (2) While I have skills in quantitative research and analysis methods, I lack training in quantitative analytical methods that are necessary for working with dyad-level data; (3) I have had no training on developing a theory-based, culturally relevant HIV prevention intervention. In particular, I have not been trained in formative research methodology, how to use both qualitative and quantitative methods, and how to work with a Community Advisory Board (CAB) using a group model building design in HIV prevention intervention development; [11](4) I have identified mobile technology as an important potential intervention approach for reducing racial/ethnic disparities in HIV among Black MSM, but I have had no training in its design nor in incorporating technology-based strategies into interventions. The K01 mentored research award will provide me with the requisite training in these areas that I have identified.