Project Summary

Women who inject drugs (WWIDs) are at significantly higher risk of contracting HIV due to both needle sharing and sexual behaviors, yet utilize HIV prevention resources less. Analysis of studies testing pre-exposure prophylaxis (PrEP) has not tested effectiveness in WWIDs and little research exists on their specific barriers to uptake and adherence. The result is a significant group who is highly vulnerable to HIV infection and its negative health consequences, yet is less likely to benefit from PrEP. Research is needed to understand how WWIDs perceive HIV risk and PrEP, and whether a targeted intervention that is embedded in an existing and trusted syringe exchange program is feasible and holds promise in addressing structural barriers to accessing PrEP and increasing its use in this at-risk population. To address this gap we will conduct a rigorous formative evaluation utilizing a unique and innovative marketing evaluation technique. Using perceptual mapping and vector modeling analysis, we will develop 3-D maps to identify specific message strategies to embed into an intervention using targeted PrEP counseling, written materials, and text based messaging and pilot tested for promise of efficacy compared to a general PrEP intervention. The intervention will address psycho-social barriers to PrEP through perceptual mapping but also societal and structural barriers by embedding it in a trusted syringe exchange and distributing medication through its medical clinic. Specific aims of the research are:

1. Assess WWIDs' perceptions of PrEP and potential barriers to use. To accomplish this we will conduct focus groups (n=30) and interviews with syringe exchange staff (n=10) and develop a perceptual mapping survey.

2. Develop a targeted communication intervention based on vector modeling findings, including print materials, PrEP counseling, and text messages, and assess feasibility and acceptability. To accomplish this we will conduct perceptual mapping surveys with HIV-WWIDs (n=100), do vector modeling analysis and create sample messages, concept test messages with WWIDs and staff (n=20), create intervention materials and conduct usability testing (n=20).

3. Pilot test the intervention by integrating into a syringe exchange to assess promise of efficacy. To accomplish this we will conduct a randomized pilot (n=50) and test an “enhanced” intervention using targeted messages with a “basic” intervention that provides general PrEP counseling. To assess promise of efficacy we will compare PrEP adherence (blood test; self report) and differences in PrEP attitudes, self-efficacy, and decisional conflict. If successful, the proposed pilot study will significantly contribute to HIV prevention by examining the unique perceptions of PrEP in WWIDs and the acceptability, feasibility, and potential impact of using health communication strategies in adjunct with existing services in a social service agency. This pilot will provide crucial information for a subsequent RO1 proposal to rigorously evaluate an urgently needed HIV prevention intervention developed specifically to meet the unique cultural and social needs of high-risk WWIDs.