## Morningside Graduate School of Biomedical Sciences MD|PhD Program in Biomedical Sciences

Announces the PhD Thesis Defense of

## **ERIC ROMO**

The Influence of Spatial Proximity to Syringe Services Programs and Secondary Syringe Exchange on HCV Risk Among Rural People Who Inject Drugs

Friday, April 22, 2022 at 3 p.m. via Zoom Meeting

**Background**: Rural people who inject drugs (PWID) have been disproportionately affected by the ongoing hepatitis C virus (HCV) epidemic.

**Methods**: Using data from a cross-sectional study of PWID from rural New Hampshire, Vermont, and Massachusetts, we evaluated the potential for syringe services programs (SSPs) to lower the risk of HCV infection among rural PWID via their influence on the physical and social environment. The specific aims were to evaluate: 1) the association of spatial proximity to the nearest SSP with HCV seroprevalence and injection risk behaviors; 2) the association of indirect SSP use (secondary syringe exchange) with HCV seroprevalence and injection risk behaviors; and to 3) explore PWIDs' perceptions and experiences with obtaining injection supplies, injection risk behaviors, and HCV.

**Results**: Living farther from an SSP was associated with a higher prevalence of HCV seropositivity and injection risk behaviors. Indirect SSP use was weakly and imprecisely associated with lower prevalence of injection risk behaviors, while direct SSP and pharmacy use were both associated with a higher prevalence of HCV seropositivity and injection risk behaviors. Participants described sharing syringes in response to limited access to syringe sources. Syringe sharing behavior was influenced by perceptions of HCV risk, HCV status, and emotions of trust and intimacy.

**Conclusion**: Spatial proximity to an SSP and direct use of an SSP may lower the risk of HCV infection among rural PWID. HCV prevention efforts in rural New England need to address syringe access and cultivate the perception that HCV is a serious but preventable risk.

Mentor

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