

<http://somatosphere.net/2012/10/recently-funded-transdisciplinary-integrated-hiv-prevention-project-overview-and-challenges.html>

Recently-funded Transdisciplinary Integrated HIV Prevention Project: Overview and challenges

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By Samuel R Friedman

[Editorial: Since [April 2012](#), Transcriptions has been an eclectic group of scholars/activists interested in building a critical engagement between disciplines and fields of action on the intersections of global health and HIV. We've been intentionally open and sought to include activists, physicians, epidemiologists, anthropologists, policy makers, and others in an interdisciplinary conversation. Some of us met at the inaugural [HIV and Social Science and Humanities](#) conference in Durban in 2011; others have joined along the way. We all come from quite different disciplinary backgrounds and varying orientations to social and political questions concerning HIV. We hope that provocative posts, such as this one from Friedman et al, will serve to stimulate lively exchange and conversations between disciplines. We invite our readers to respond thoughtfully and critically – either in the comments field at the end of the article or as a separate post (for longer responses, please email us at transcriptions@somatosphere.net)]

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I (Sam Friedman) recently received a US National Institute on Drug Abuse Avant-Garde Award to develop, conduct and study a new HIV prevention project. The proposal was based in part on what was done in the allied “Project Protect” project in Ukraine. The new project will focus on two situations where HIV incidence has remained high for many years (IDUs and sex workers in a Ukrainian city, probably Odessa; and African American MSM in Chicago, Illinois) and on one recent HIV outbreak (focused among IDUs in Athens, Greece—which may have been sparked by the ongoing economic difficulties, cutbacks, and political turbulence in Greece in recent years, which we look at as a “big Event” (Friedman et al.

2009). The new research project aims to zero in on people with recent HIV infection and then recruit people into the project who are in their risk networks and social networks, or who find sex or injection partners at the same locations as participants with recent infection. When we find someone with acute or recent infection in the networks or venues, we will follow their networks and venues as well. All of these people are strategically important because some studies have found that half of new infections are transmitted by people within a year of their becoming infected. We aim to prevent such transmission insofar as we can while referring them to needed medical and other assistance.

Once we find people with recent infection, whether through the project itself or by referral from medical services or local NGOs, we will interact with them in several ways. In addition to eliciting information and assistance in tracing their networks and venues, we will give them appropriate counseling and then put them in touch with treatment services for HIV, alcohol or drug problems, and other services that may benefit them and perhaps reduce the probability that they will transmit HIV to others. We will also put out “community alerts” to their immediate social networks and venues that tell people that someone in their immediate social neighborhood has recently been infected with HIV and is thus highly infectious. We will urge them to be super-cautious for the next 6 months and provide them with condoms, syringes and other materials. This should help them avoid becoming infected, and in addition may mean that others in the infection chain who have acute or recent infection may also take precautions even if they do not know they are infected.

For this to work, we will educate at-risk communities in the cities where we will be operating about the natural history of early HIV infection. We will emphasize the fact that high infectivity lasts for only a few months and thus that they should support each other during community alerts rather than stigmatizing people they think might have recently become infected. In doing this, we want to avoid panic and perhaps stigmatization or violence directed at people whom others come to think of as “super-infectors.” In the pilot project in Ukraine, we did not encounter such problems. This favorable outcome may have been because of the community-embeddedness of our Ukrainian team and because of their sensitivity to the concerns and fears of participants. If we proceed in the new project, we will take pains to assure community embeddedness and to forestall and (if we fail) to understand, research, and avoid repetitions of any untoward events.

The funding of this project shows a willingness on the part of NIDA and perhaps a growing willingness on the part of other agencies to support projects that synthesize the social with the biomedical. The social aspects of this project include both social network theory and methods and also

community intervention theory and methods. Biomedical methods will be used to detect whether potential participants have acute or recent HIV infection. Epidemiologic theory comes in through the concept of infection chains, which are the pathways through networks through which the infection actually traveled. Deep sequencing of the virus with which they are infected will let us conduct phylodynamic analyses to determine these infection chains. Phylodynamic techniques will also be used to help us determine whether the intervention is reducing transmission.

Unlike many other HIV prevention and treatment methods, this technique will follow the virus to where it is likely to be transmitted. Since we will follow infection chains as they pass through bridge groups, our intervention will not be restricted to any one “key population” such as MSM, PWID, or sex workers, but will find people who have recently been infected regardless of such sociobehavioral categories. This is important. From Friedman’s work and that of many other network researchers over the last two decades or more, it has become apparent that “identity categories” like gay man or person who injects drugs are only loosely aligned with whom people have sex with or with whom they use drugs. This first became glaringly obvious in the high infection rates of women who both have sex with other women and who inject drugs (Jose et al, 1993; Friedman et al 1995, 1997), but is also quite evident in a variety of community network and group sex studies such as those described in Friedman et al (1997, 2007, 2008, 2011). Thus, although there are good reasons why some kinds of prevention programs might focus in on Key Populations or identities, programs that directly target HIV transmission should consider a broader focus.

The editorial group that oversees this blog asked us to speculate about why a transdisciplinary project of this kind interested NIDA funders and indeed led them to see it as having the potential to transform the field whereas other projects with a major social component might not get funded. We think that one important reason is the clarity of the goals of this project and the ways in which it meshes with central goals of NIH. This project aims to reduce HIV transmission and to get people into HIV treatment soon after infection through a well-integrated set of social and clinical interventions. Its underlying methods and theory rest firmly on those of socially-informed epidemiology, clinical science, and community intervention methods that NIDA has helped to develop. It thus integrates the social with epidemiology and clinical science in pursuit of clearly practical outcomes. In this, it might perhaps appear to many reviewers as quite distinct from research proposals whose main outcomes are or appear to be the advancement of social science theory. In addition, it might appear to reviewers to be “grounded in material reality” rather than in concepts of social emergence, identities or interaction that reviewers may not understand. However, we want to emphasize that this paragraph

is very speculative. We also want to be clear that we do not subscribe to these critiques that we are speculating the reviewers might have.

There is another way to frame this that may be useful for the field. The emergence of “Treatment as Prevention” as a primary HIV intervention strategy may seem on its face to be a thoroughgoing biomedicalization of the field. This interpretation is premature, however, because Treatment as Prevention has three major Achilles Heels that all show the vital necessity of social analysis and of socially-based transdisciplinary prevention. The first Achilles Heel, and that which is the focus of our new project, is the inability of biomedical institutions to recruit enough people in their acute and recent infection periods to prevent a large proportion of transmissions. (We hope to solve that problem, based on years of social network and community intervention research). A second Achilles Heel is one we are just realizing the importance of for our study (and for effective prevention and care): This is that many medical institutions are hostile environments for many people likely to have recently become infected (ongoing drug users, sex workers, high-risk MSM, poor people), at least in some countries. Social research can contribute to analyses that may help make these environments less hostile and that also may make it easier for the recently-infected to go to medical and other institutions and to adhere to medically-important regimens. The third Achilles Heel, economic sustainability, is clearly critical to prevent what we hereby name “Rebound Epidemics,” and likewise can benefit from social research and action (although these are not the focus of the project being discussed here.)

We hope that this project will encourage others to develop transdisciplinary integrated approaches to preventing transmission or to improving medical outcomes for people with HIV.

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