



# mSTUDY Newsletter

*How do drug use and sexual behaviors affect the health of HIV positive and negative mSTUDY participants?*

## Research Highlight

### What do we do with ALL those specimens?

Researchers have long thought that substances such as methamphetamines and heroin play a large part in the HIV epidemic by driving acquisition and transmission. This may be due in part to addiction and dependence or to behaviors practiced while under the influence, such as elevated sexual activities. The sexual drive and desire to obtain drugs that is associated with drug use can lead individuals into sexual situations that compromise their safety and that of those around them. Yet unlike drugs such as meth and MDMA, marijuana does not result in physical dependence nor does it create a high that enhances sexual drive or stimulation.

A study led by Co-Primary Investigator, Dr. Pamina Gorbach, found that marijuana-using mSTUDY participants did not practice greater risk nor did they experience more STIs or HIV acquisition than either the non-drug users or other drug users. The study found that marijuana using participants may engage in fewer social risks and environments where the prevalence of STIs are high, such as in jails, in networks of sexual diversity including transgender individuals, and in violent relationships. This is likely tied to how the drug itself is now acquired. Medical marijuana has been legal in Los Angeles for over a decade and acquisition of it is relatively easy. Moreover, use of the drug itself is not as expensive or required with as much frequency as compared to the use of meth for those addicted. Marijuana use does not put the user into as many potentially violent or risky environments and the user is rarely arrested for possession or being under the influence. It also may be that marijuana use was for relaxation and sensations that remove them from sexual risk. As it turns out, stoned may be safer than sober for many young MCSM.



## NOTE FROM CO-PRIMARY INVESTIGATOR: DR. SHOPTAW



The headlines in Los Angeles suggest that compared to the rest of the nation, we have been spared – so far – from many of the devastating effects of the current epidemic of addiction to opioids (heroin, fentanyl, etc.) and drug overdoses. Of course, there are Los Angelenos who are addicted to opiates. But for as long as I've lived and worked in Los Angeles, we've always had our own kind of drug epidemic – the epidemic linked directly to HIV. Los Angeles has the second highest concentration of HIV/AIDS cases nationally and many of these cases are linked to the use of stimulant drugs, such as methamphetamine and cocaine. HIV risks linked to stimulants when used by men who have sex with men involve extreme sexual behaviors when under the influence that support transmission. Likewise, evidence shows that using stimulants can actually increase HIV transmission.

As scientists, cohort members and stakeholders, we have a collective obligation to do our part to leverage research to help guide us toward healthier futures. So, over the next months, our mSTUDY collaborating scientists will analyze our data looking for real-time signals of a growing drug epidemic here in Los Angeles – even if that growing epidemic involves stimulants, alone or in combination with opiates or other drugs. So, stay tuned – and don't be surprised if, as usual, Los Angeles will write its own take on the current drug epidemic.

### ***How do drugs change the microbiome of HIV positive and negative participants?***

We all have trillions of bacteria that live in our body and help regulate important functions like digestion, absorption of nutrients, and even how our body fights infection.

Dr. Jennifer Fulcher is using the rectal swab specimens to understand how using different drugs may change these healthy bacteria that live in your gut. So far, this work has shown that methamphetamine use can increase some of the bad bacteria that leads to inflammation. Marijuana may have the opposite effect, however, and increase some of the healthier bacteria. This work is important to help us understand the health effects of these different drugs.

### ***How do our behaviors change the experiences of HIV positive and negative participants?***

Dr. Michael Li has assessed the link between experiences of homophobia, homelessness, and methamphetamine use in 380 MSM of color of both HIV-negative and HIV-positive status, across 2 years. His analysis suggests that experiences of homophobic harassment and violence are risk factors for homelessness, and in turn, greater severity of methamphetamine use. The burden of being HIV-positive appears to further complicate risk of methamphetamine use, while the burden of being HIV-positive appears to further complicate risk of methamphetamine use.

### ***STAFF SPOTLIGHT: ROBYN KRYSIAK***

*Research Nurse Practitioner at the Los Angeles LGBT Center*

I became involved in clinical research because it allowed me the opportunity to provide high-quality healthcare above and beyond a patient's regular care, but with fewer time, insurance, and pharmacy constraints. My favorite part about being on the mSTUDY team at the LGBT Center is that not only do we truly care about the study participants as individuals, but we also care about the mission and goals of the study and genuinely strive to provide non-judgmental care to all participants. The most challenging part of my job is seeing the direct effects that meth can have on the health and lives of participants. Outside of work, I love food, traveling and spending time with my friends and family, especially my sweet little dog, Winnie the Poodle. My favorite part of being a mSTUDY Clinician is when I walk into an exam room and I don't even recognize the participant because, since their last visit, they have stopped using meth and started taking HIV medications daily. The physical, emotional and behavioral transformations can be mind-blowing!



### ***STAFF SPOTLIGHT: MICHELE VERTUCCI***

*Research Clinician at the UCLA Vine Street Clinic*



I have been involved with HIV since 1989. I worked with two HIV medical private practice groups that did HIV drug research and I saw too many people die over the years. Drug research has given people who are living with HIV a chance at living a full life. My favorite part of being on the mSTUDY team is having the opportunity to work with a group of dedicated individuals who care about our participants. I enjoy seeing and forming relationships with the participants in all of our studies and my co-workers here at Vine Street. The most challenging part of my job has to be staying in touch with the mSTUDY participants because a lot can happen in six months. Outside of work, I enjoy spending time with my husband and son. I also enjoy reading, crossword puzzles, listening to jazz and going to jazz shows and watching the Dodgers and the Kings play.