

# HRP Research Findings Timeline

## 2021



**June 2021:** A NIDA-funded [study](#) suggests that initiation of buprenorphine in people with HIV increases the probability of viral suppression after accounting for both measured and unmeasured confounders.



**June 2021:** NIDA researchers launch a [clinical trial](#) in five U.S. cities, delivering integrated health services through mobile clinics to improve HIV and substance use outcomes among people with opioid use disorder who inject drugs.

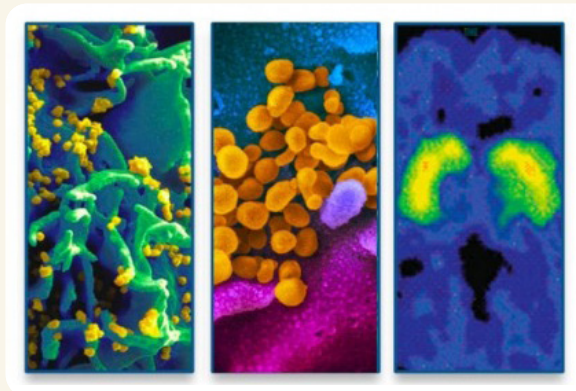


**June 2021:** A [meta-analysis](#) of studies evaluating the effect of medication treatment for opioid use disorder (MOUD) on infectious disease outcomes revealed that MOUD is associated with greater antiretroviral therapy (ART) adherence and HIV viral suppression.



**April 2021:** [Findings](#) confirm that methamphetamine use is associated with failure of viral suppression among sexual-minority men on ART, independent of other sociodemographic factors and adherence.

## 2020



**November 2020:** NIDA [researchers suggest](#) that co-occurring methamphetamine use and HIV present compounded risk for contracting the novel coronavirus (SARS-CoV-2), helping to fuel the COVID-19 pandemic.



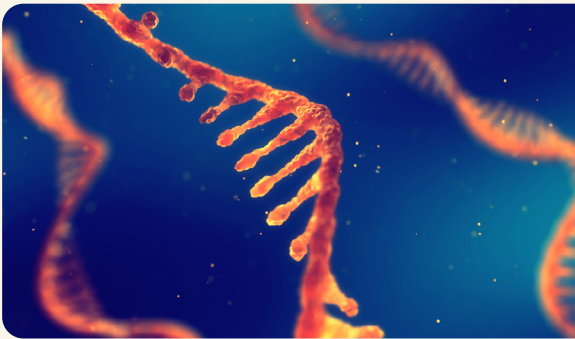
**August 2020:** Chosen as a runner-up in [Science magazine's Breakthrough of the Year](#), a [unique NIDA study](#) investigated elite controllers — a subset of people with HIV who are able to maintain suppressed viral loads for years without ART — had HIV integrated into their blood cell genomes in specific locations where the DNA was turned off, or silenced, so HIV replication could not occur.

2020



**September 2020:** [Examination of leDEA\\* consortium sites](#) reveals persistent gaps in the integration of substance use education, screening, and referral services into pediatric and low-income HIV treatment settings.

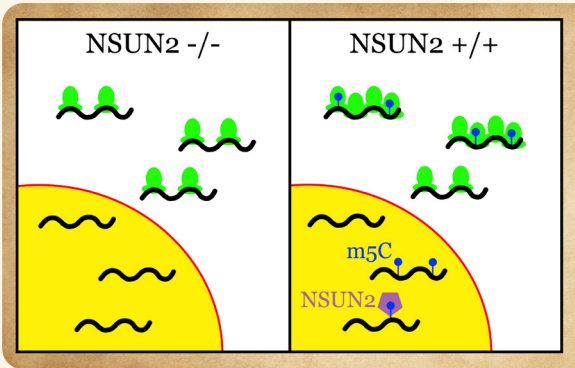
*\*International epidemiology Databases to Evaluate AIDS*



**May 2020:** [Single cell transcriptomics study](#) reveals both acute and chronic opioid usage suppress immune system antiviral defenses.

**February 2020:** [Longitudinal study of people living with HIV](#) shows that both abstaining from and reducing substance use are associated with viral suppression.

2019



**December 2019:** NIDA-funded study of sexual minority men living with HIV who use methamphetamine demonstrates [sustainable reductions in viral load following integrative behavioral intervention](#).

**August 2019:** [Epitranscriptomic research](#) reveals unexpected roles for m5C modification and NSUN2 protein in HIV replication.

▲ Illustration shows HIV-1 viral transcripts modified by the addition of 5-methylcytosine (m5C) residues and loss of NSUN2 methyltransferase. Credit: Bryan R. Cullen

2018

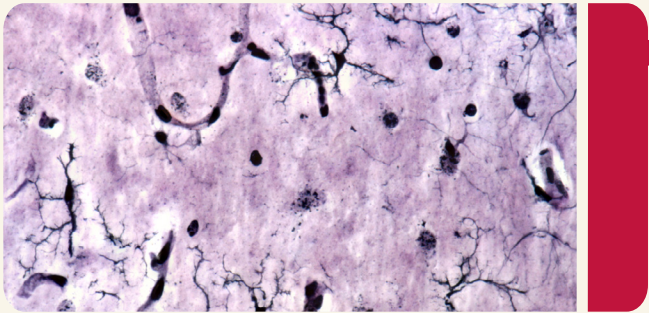


▲ Daily pill organizer. Credit: NIAID

September 2018: [NIDA-funded epidemic modeling study](#) reveals minimal effect of drug law reform in Tijuana, Mexico on HIV incidence among people who inject drugs without concurrent linkage to opioid agonist treatments.

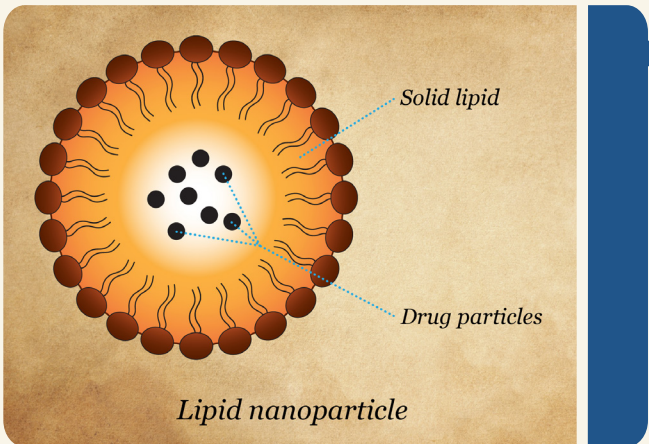
September 2018: [International study among people who inject drugs](#) provides evidence that a specific flexible, scalable intervention increases reported use of antiretroviral therapy for HIV as well as medications for substance use disorder.

2017



February 2017: Scientists at NIDA's Intramural Research Program advance the study of HIV infection in the brain, with a [new in vitro model of HIV activity in microglia](#).

2016



September 2016: [Research demonstrates utility of dynamic co-infection modeling](#) in disentangling contributions of different risk groups and behaviors to aid in HIV prevention.

August 2016: NIDA-funded scientists publish a [review of the potential of nanomedicine](#) in screening, recognizing, and eradicating HIV-1 infection from the central nervous system.

July 2016: [Research by the NIDA Clinical Trials Network \(CTN\) shows that](#) improvements in viral suppression during patient navigation (care coordination with case management) with or without financial incentives are not sustainable.





2014

**February 2014:** [NIDA Avant-Garde supported study](#) confirms effectiveness and sustainability of “HIV treatment as prevention” at the population level.

2013

**December 2013:** [Mathematical models and population-based ecologic studies](#) suggest expansion of antiretroviral treatment can control the spread of HIV.



2011

**January 2011:** [NIDA CTN research](#) underscores the importance of access to detoxification followed by transition to continued treatment for people who inject drugs.



2010

**August 2010:** [British Columbia Study](#) shows increasing highly active antiretroviral therapy coverage decreases viral load and new HIV diagnoses at a population level.

▲ Antiretroviral drugs to treat HIV infection. Credit: NIAID

2009



- September 2009: [Research coordinated by NIDA's CTN](#) demonstrates that intensive skills-based HIV prevention intervention reduces unprotected sex among men in substance use treatment.
- April 2009: [NIDA's first Avant-Garde awardee uses estimated community plasma HIV-1 RNA concentrations to predict HIV risk](#) independent of high-risk behavior, and confirms expanded highly active antiretroviral therapy is associated with both reduced community plasma viral load and HIV incidence.

2008

- August 2008: Study results indicate a [history of injection drug use is not associated with decreased survival](#) among HIV-infected patients beginning highly active antiretroviral therapy.

2007



- July 2007: [NIDA CTN research](#) suggests that increased funding of infection-related health services in substance use treatment settings coupled with supportive state policies may reduce mortality of HIV, hepatitis C, and sexually transmitted infections.

2005



- February 2005: [Markov model](#) confirms that routine HIV screening in health care settings is cost-effective and should be expanded.