HIV Research @ the San Francisco Dept. of Public Health AIDS Office
SFDPH AIDS OFFICE (Population Health Division)

Bridge HIV
Community Health Equity and Promotion
HIV Care
Center for Public Health Research
Applied Research, Community Health Epidemiology, and Research (ARCHES)
Bridge HIV: A Tradition of Innovative Research to Prevent HIV/AIDS

SF City Clinic Cohort Study
- HIV antibody test
- Natural history
- Long term non-progression (LTNP)

Hyman Scott, MD, MPH

Vaccine Preparedness Studies
- Recruitment and retention of at-risk cohorts
- Risk factors for infection
- Per-contact risk

Behavioral and Biomedical Interventions
- Individualized, client centered counseling
- Preventive Vaccines*
- STD interventions (HSV-2 suppression)
- Pre-exposure Prophylaxis*
- Rectal and vaginal microbicides*
- Peer navigation among Black and Latino MSM*
- Home HIV and STI testing*

Evaluating Platforms for Intervention Delivery and Building Research Capacity
- Combination Prevention*
- Implementation Research*
- Fostering a new generation of HIV researchers*

*Active studies

Albert Liu, MD, MPH

Susan Buchbinder, MD

Hyman Scott, MD, MPH

*Active studies
Next generation of PrEP Research

**HPTN 069, 077**
- Evaluate safety and tolerability of Maraviroc (CCR5 inhibitor) GSK744-LA long-acting injectable (integrase inhibitor)

**MTN 017, 028**
- Evaluate safety, acceptability, PK of
  - Rectal TFV gel (daily, pre/post anal sex)
  - Vaginal ring (MK-4176 CCR5 inhibitor and MK-2048 integrase inhibitor)

**DOT-DBS**
- Help develop novel methods to measure HIV medications in people’s bodies.
- Dried blood spots and hair samples can be used as a tool to accurately measure how often people take their PrEP pills

**PrEP Cascade**
- Measure PrIDE Project via surveillance of community PrEP awareness, knowledge, access, uptake, and adherence, the key steps in the PrEP cascade

**EPIC (NIMH R01, completed)**
- Develop and evaluate novel adherence strategies to support PrEP (SMS, integrated counseling)

**iPrEx OLE, completed**
- Offer open-label Truvada to iPrEx RCT ppts to evaluate uptake, adherence, risk practices
<table>
<thead>
<tr>
<th></th>
<th><strong>ODS</strong></th>
<th><strong>COPING</strong></th>
<th><strong>Transitions</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Population &amp;  Setting</strong></td>
<td>People prescribed opioids (N= 600)</td>
<td>People prescribed opioids (N= 300-400)</td>
<td>People prescribed opioids (N= 600)</td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
<td>Observational</td>
<td>Observational</td>
<td>Observational</td>
</tr>
<tr>
<td><strong>Primary outcome</strong></td>
<td>HIV outcomes</td>
<td>Pain and function</td>
<td>Illicit opioid use</td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td>Chart review</td>
<td>Longitudinal cohort, up to 4yr f/u</td>
<td>Longitudinal, retrospective cohort</td>
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</table>

**ODS**
- Phillip Coffin, MD

**COPING**
- Glenn-Milo Santos, PhD

**Transitions**
- Ongoing Trials and Observational Studies

**Glenn-Milo Santos, PhD**

**Phillip Coffin, MD**
# Substance Use Research Unit

**Ongoing Randomized Intervention Trials**

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<tr>
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<th><strong>Bye-C</strong></th>
<th><strong>Say When</strong></th>
<th><strong>ADAPT-2</strong></th>
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<tbody>
<tr>
<td><strong>Population</strong></td>
<td>People who inject drugs (N=30)</td>
<td>Binge-drinking MSM (N=120)</td>
<td>Meth users (N=53)</td>
</tr>
<tr>
<td><strong>Intervention &amp; Control</strong></td>
<td>Modified directly observed treatment (mDOT) of HEP-C tx</td>
<td>Oral naltrexone vs. placebo, as-needed</td>
<td>Bupropion &amp; ER naltrexone v placebo</td>
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<tr>
<td><strong>Outcome</strong></td>
<td>Adherence</td>
<td>Alcohol Use, Sexual Risk Behaviors</td>
<td>Methamphetamine use</td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td>RCT, 8 week f/u</td>
<td>Double-blind RCT, 3 month f/u</td>
<td>Double-blind RCT, 3m f/u</td>
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</table>
HIV Epidemiology Research

National HIV Behavioral Surveillance

- SF arm of CDC’s National HIV Behavioral Surveillance
- Ongoing research into HIV prevalence, incidence, and HIV risk behaviors among populations at high risk for HIV in SF
- Rotating annual cycles:
  - MSM,
  - PWID,
  - Trans women,
  - Heterosexuals at risk for HIV infection

Henry Raymond, DrPH
Naloxone Pre/Post-test

Population & Setting
- Alcohol-dependent High Users of Multiple Systems (HUMS) clients of SFDPH (N=10)
- Patients on chronic opioids from primary care clinics (N=6)
- Naloxone recipients from the Drug Overdose Prevention & Education (DOPE) Project (N=60-100)

Intervention
- Intramuscular naltrexone
- Brief naloxone training

Outcome
- Urge to drink, medical services utilization
- Naloxone uptake, acceptability

Brief Overdose Recognition & Response Assessment (BORRA), knowledge of overdose and naloxone use

Ongoing Feasibility and Evaluation Studies

Glenn Milo Santos, PhDc, MPH

Phillip Coffin, MD, MIA

Brazil: Promoting testing, linkage to care, and navigation in care for MSM

Guyana: Helping to establish a new school of public health

Myanmar: Promotion of community health workers to deliver diarrhea and malaria treatment

China: Promoting testing, linkage to care, and navigation in care for MSM

Kazakhstan: Estimating the number of MSM, IDU, FSW

Multiple African countries: HIV prevention for vulnerable populations

Australia: Sampling fishers to identify over-fishing

Myanmar: Promotion of community health workers to deliver diarrhea and malaria treatment

Brazil: Promoting testing, linkage to care, and navigation in care for MSM
The SHINE study
- Longitudinal study of young transwomen aged 16-24 years
- Study of HIV risk and resilience
- 300 participants recruited

Health eNav
- Demonstration project to use digital navigation to engage and retain young transwomen and MSM in HIV care
- Leverages SFDPH system
- 120 participants

Trans*National Study
- Prospective HIV incidence study of transwomen in 4 countries
- HIV risk, trans-specific and country-specific predictors of risk are assessed
- HIV, HCV and other STI testing
- 1,500 participants
HIV Epidemiology and Surveillance Section

- Core HIV/AIDS Surveillance
- HIV Incidence Surveillance
- Molecular HIV Surveillance
- Medical Monitoring Project
- Provide Metrics to Monitor Success of all Getting to Zero Strategic Initiatives
- HIV Epidemiology and Surveillance Section is in the Applied Research, Community Health Epidemiology, and Surveillance Branch (ARCHES)

Wayne Enanoria, PhD, MPH
Susan Scheer, PhD, MPH
HIV Epidemiology and Surveillance

- Monitor incidence, prevalence, morbidity and mortality of persons with HIV/AIDS in San Francisco, following government mandates
- AIDS case reporting since 1981, name-based HIV case reporting since 2006
- Mandatory dual reporting by provider and laboratory of HIV test results including viral load and CD4 test results
- Longitudinal registry
  - Follow-up chart reviews for ART, prophylaxis, OIs
  - Current address and homeless status
  - Deaths and multiple causes of death
Collaborative studies (Bridge HIV, CPHR/SURU, and/or ARCHES)

Stay Study 1st Trans PrEP Demo project

PrEP Cascade
- Development of a measure of the PrEP cascade
- PrEP surveillance in SF

Summer HIV/AIDS Research Program (SHARP)
- Undergraduate training program to address disparities in HIV research