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



Susan **Buchbinder** , MD



Albert Liu, MD, **MPH**



Hyman Scott, MD, MPH

Vaccine **Preparedness Studies**

- retention of at-risk **SF City Clinic** cohorts
 - Risk factors for
- HIV antibody test infection

Cohort Study

- Natural history
- Long term nonprogression (LTNP)

- Recruitment and
- - 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 naviaation among Black and Latino MSM*
- Home HIV and STI testina*

Evaluating Platforms for Intervention **Delivery** and Building Research Capacity

- Combination **Prevention***
- Implementation Research*
- Fostering a new generation of HIV researchers*

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

Substance Use Research Unit (CPHR)

Ongoing Trials and Observational Studies

Phillip Coffin, MD

Glenn-Milo Santos, PhD







1700	ODS	COPING	Transitions
Population & Setting	People prescribed opioids (N= 600)	People prescribed opioids (N= 300-400)	People prescribed opioids (N= 600)
Intervention	Observational	Observational	Observational
Primary outcome	HIV outcomes	Pain and function	Illicit opioid use
Design	Chart review	Longitudinal cohort, up to 4yr f/u	Longitudinal, retrospective cohort

Substance Use Research Unit

Ongoing Randomized Intervention Trials







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

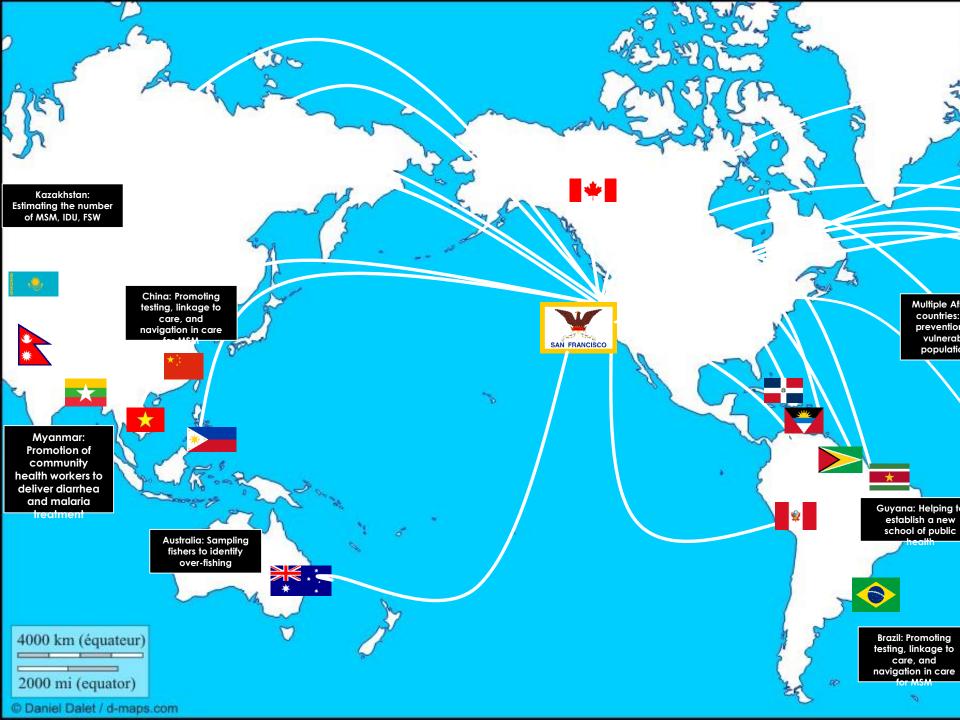
HIV Epidemiology Research



Henry Raymond, DrPH

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,
 - ▶ <u>PWID</u>,
 - ► <u>Trans women</u>,
 - ► Heterosexuals at risk for HIV infection





Erin C. Wilson, DrPH



Sean Arayasirikul, PhD











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)



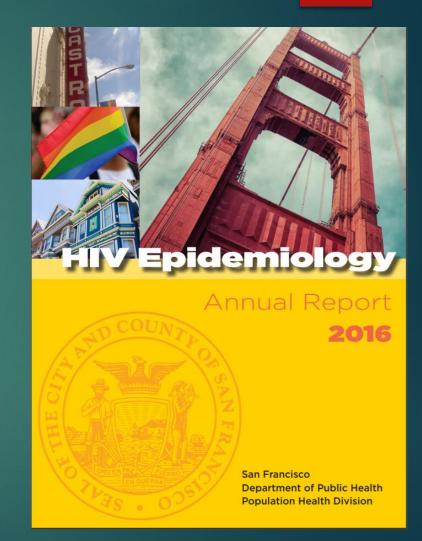
Wayne Enanoria, PhD, MPH



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, namebased 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