

Bridge HIV Formerly “HIV Research Section”



POPULATION HEALTH DIVISION
SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

Protecting and Promoting Health and Equity

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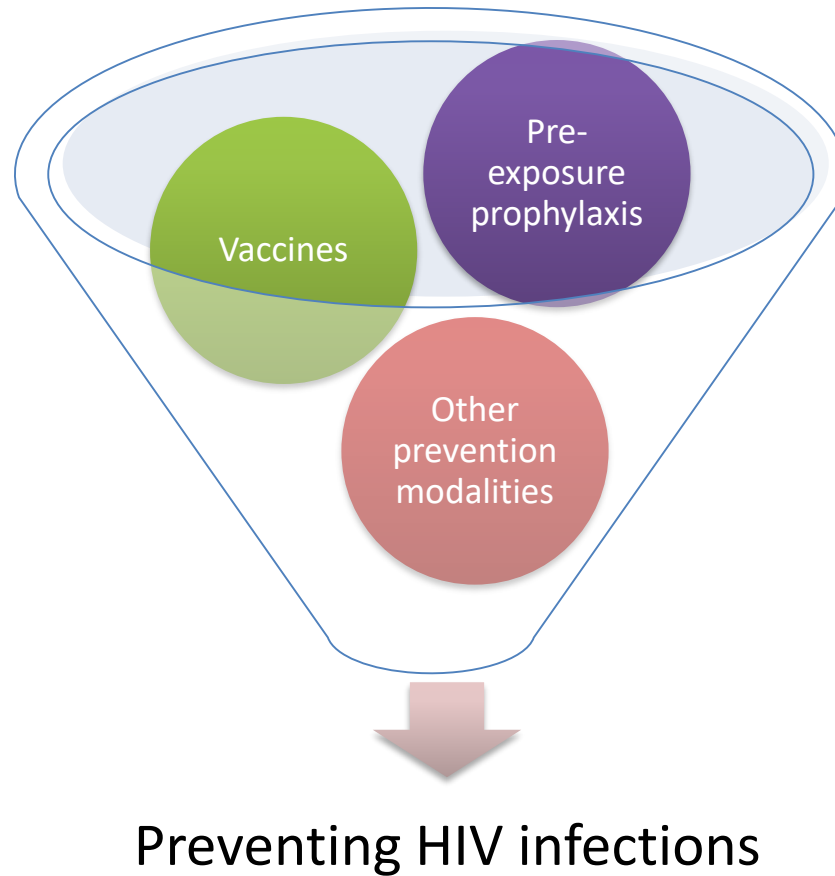
Health Commission Community Meeting



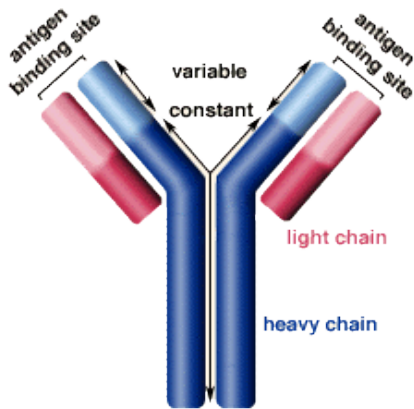
Bridge HIV

- **An HIV Prevention Research unit**
- **Research funded by federal (NIH) and state (UC)**
 - Obtained \$10 million for renovations to 25 Van Ness
 - Approximately \$5 million in grants/year
- **Unique global research housed in local health department**
 - Evaluating HIV prevention interventions and dissemination
 - Focus on addressing disparities
 - Leadership in Getting to Zero SF

HIV Prevention in Multiple Ways



What is an Antibody?



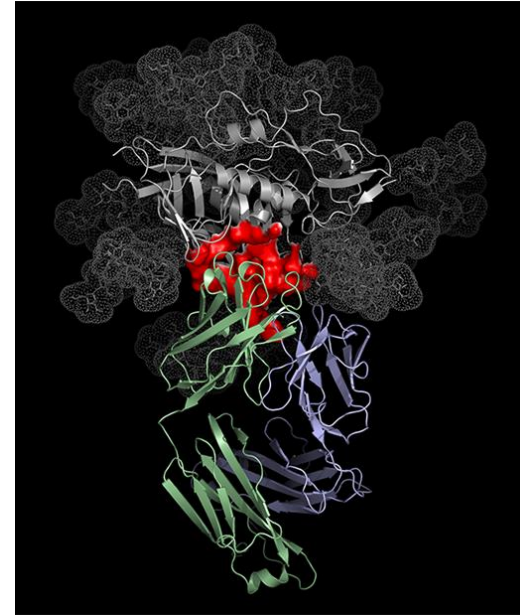
Antibodies are proteins made by the immune system to help fight infection.

- “Broadly Neutralizing Antibodies” (bnAbs) are rare antibodies that have been effective at stopping a wide range of HIV types from replicating
- Found in long-term non-progressors, then synthetically manufactured

AMP: Antibody Mediated Prevention

The AMP Study will test if a special bNAb (VRC01) against HIV will protect people from HIV infection.

Conducted in 14 sites in the US and in Africa (7 countries), South America (2 countries), Europe (1 country)



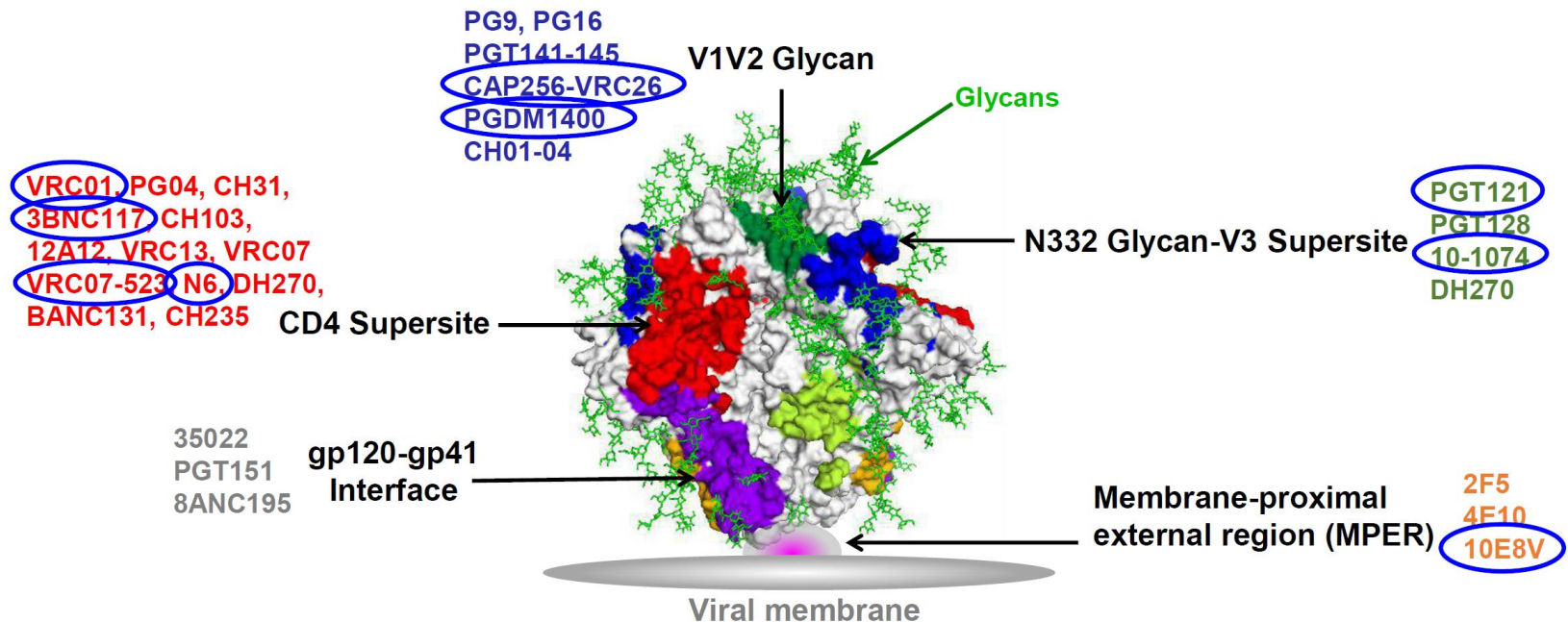
Gray: gp120

Red: CD4 binding site (CD4bs)

Purple & Green: VRC01 attached to the CD4bs

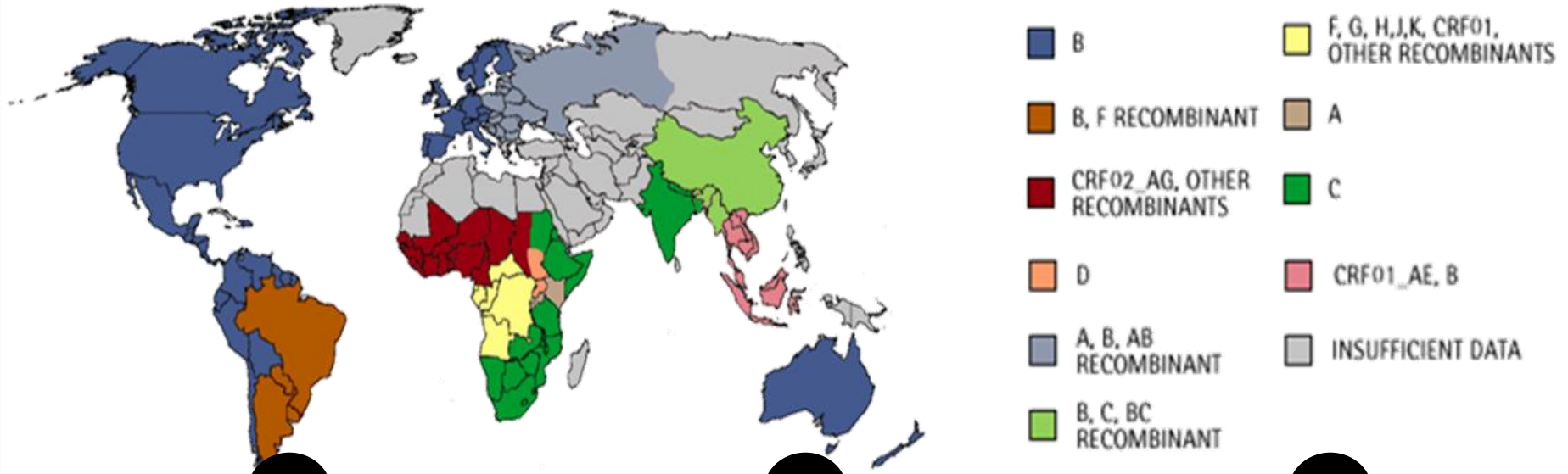
Many more antibodies in the pipeline

Epitope Specificity: Broadly Neutralizing mAbs in Development



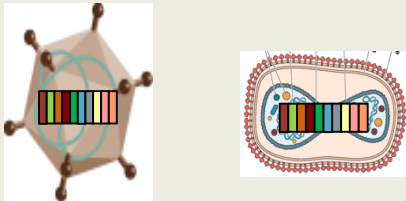
Epitope classes have distinct neutralization profiles.

Launching sister vaccine trials in women in Africa and MSM/TG in the Americas, Europe



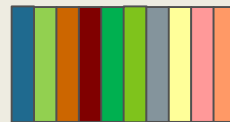
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Vectors that elicit optimal immune responses



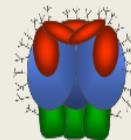
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Mosaic inserts for global coverage (Gag-Pol-Env)



3

Trimeric gp140 env proteins for improved humoral immunity



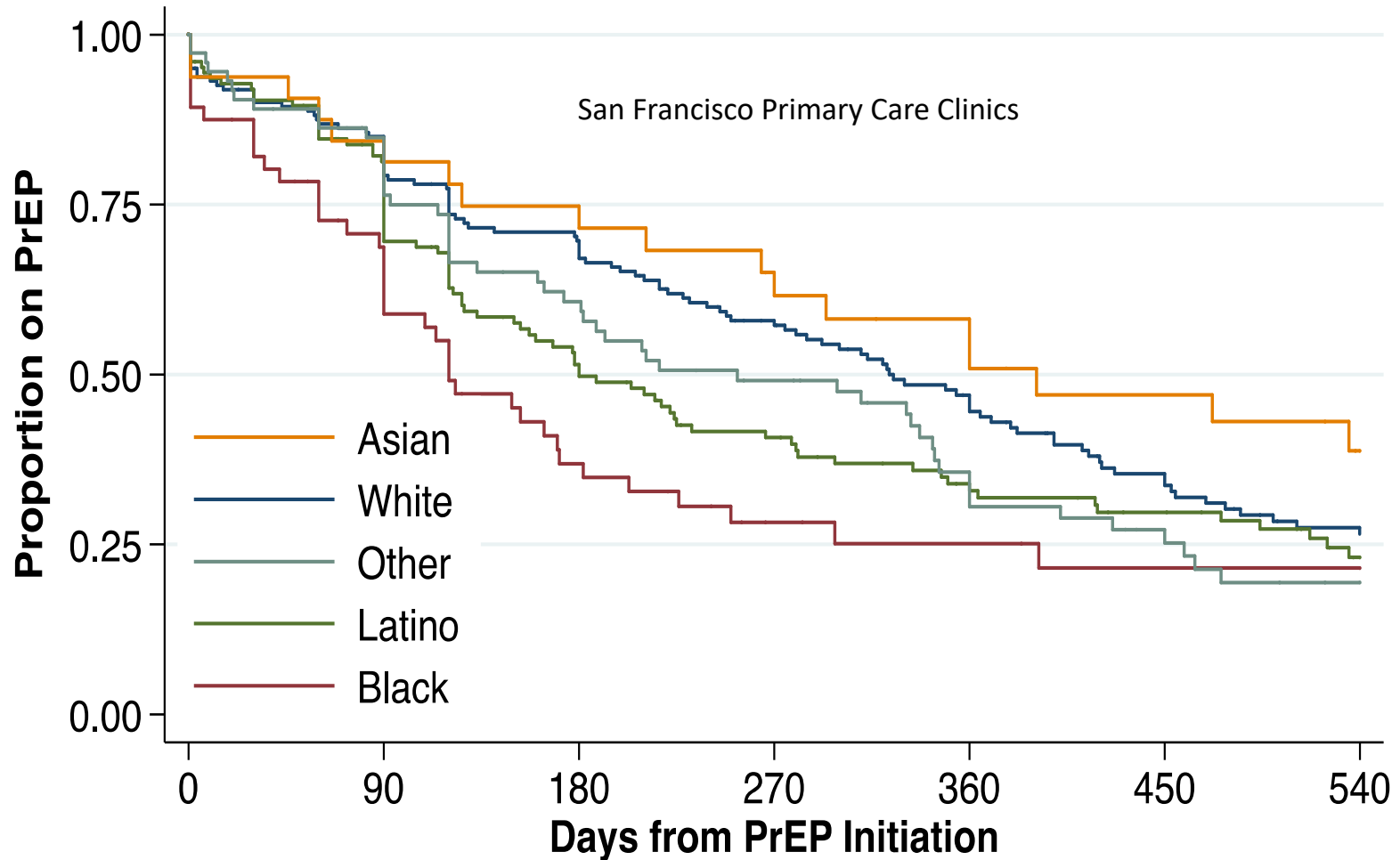
HVTN 705/HPX2008 will be using Clade C gp140

What is Pre-Exposure Prophylaxis (PrEP)?



- With PrEP, an HIV negative person starts anti-HIV medication before exposure to HIV and continues throughout periods of risk.
- The daily pill Truvada (TDF/FTC) was found to be safe and effective in preventing HIV and was approved by the FDA in 2012.
- Studies are now testing new medications and forms of PrEP.

Lack of PrEP persistence accentuates disparities



Top 5 reasons why people stop PrEP

1. Self-perceived low risk
2. Cost or changes in insurance coverage
3. Medication side effects (actual or anticipated)
4. Pill fatigue
5. Difficulty adhering to provider/lab appointments

1. Assisting accurate HIV risk assessment: mysexpro.org



- Interactive, online HIV risk assessment tool for MSM using data from several large cohorts of MSM.
- Calculates HIV personalized risk score (scale 1-20, with positive frame).

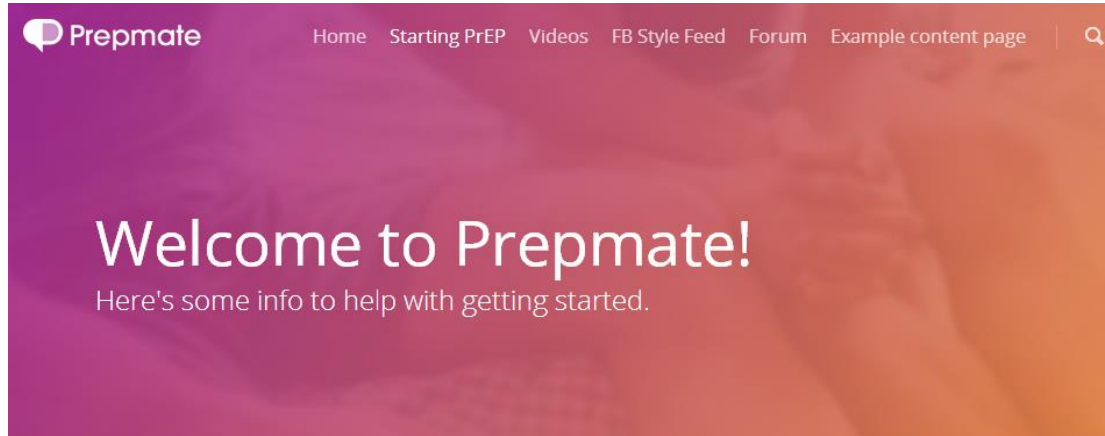
- Piloted in 240 MSM in SF, NY, Lima, Rio de Janeiro
- Found to be easy to use and desirable, esp. young MSM

2. Cost and insurance issues

Receiving PrEP navigation services is associated with increased persistence in San Francisco Primary Care Clinics

Predictor	Adjusted OR	95% CI
Transgender woman	0.54	0.37-0.76
Illicit substance use	0.66	0.50-0.87
Patient navigation	1.45	1.10-1.92

3. Addressing side effects



- Patterned after the WelTel model of weekly text-message check-ins to support ARV adherence
- Impact primarily through personalized communication between participants and clinic staff



How is PrEP going?

Ok

Not great.

4. Coping with pill fatigue

**SHOW US
YER CHEEKS**
FOR PrEP RESEARCH

PrEP IS A PILL THAT PREVENTS HIV.
COULD IT ALSO *be a shot?*

VOLUNTEER FOR A PrEP RESEARCH STUDY
AND HELP US FIND OUT.

YOU MAY BE ELIGIBLE IF YOU ARE AN HIV-NEGATIVE PERSON 18-65 YEARS OLD.

VOLUNTEERS CAN RECEIVE UP TO \$75 PER VISIT AND HIV TESTING & COUNSELING.

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5. Difficulty adhering to appointments

- Proposal: PrEP Digital Diary and Delivery (PrEP-3D)
- Developed app with digital sexual and pill taking diary to guide adherence
- Collaboration with Alto Pharmacy
 - Delivers medications throughout the Bay Area
 - Pharmacist can do prescribing, monitoring all through a practice agreement

Thank you and Questions?

