

# *California HIV/AIDS Research Program (CHRP)*

## CHRP Overview

*April 7, 2017*

## ● **CHRP Background**

- ❖ Founded in 1983 by the state legislature
- ❖ Since 1983, over 2,000 research grants awarded to >50 CA Institutions; nearly \$300M in funding
- ❖ For every \$1 invested by CHRP, \$2.40 in federal and other grant support was attracted to California (2016 survey)
- ❖ Nearly 25% of Californians living with HIV infection & in care are served by clinics funded by CHRP through its strategic research initiatives (2014 data)

## ● **CHRP Mission**

*CHRP fosters outstanding and innovative research that responds to the needs of all people of California, especially those who are often under served, by accelerating progress in prevention, education, care, treatment, and a cure for HIV/AIDS*

## Grantees: CHRP Leverage

- Grantees from 2010 through 2015 have used CHRP funds as leverage to bring in **nearly \$80 million** in Federal and other HIV funding
- Nearly \$62 million of this leveraged funding comes from NIH
- \$9.5 million comes from CDC
- Overall, \$2.40 leveraged for every \$1 CHRP spent among those grantees responding to the survey

# CHRP Publications: Grants from 2009-2013

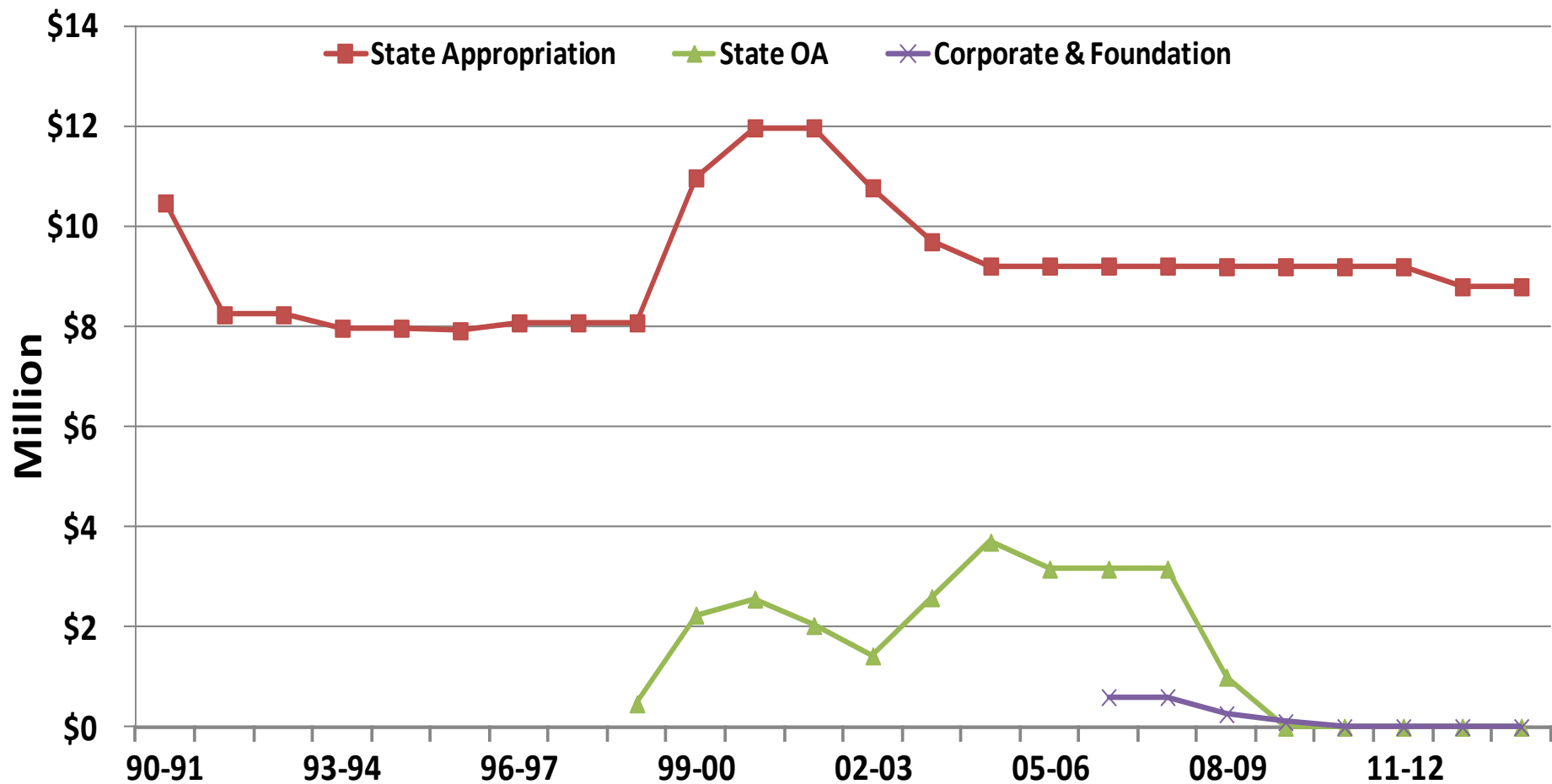
- Funded 98 Projects (111 grants)
- Totaling \$44,684,026 in funding
- These projects resulted in 148 peer reviewed publications

Average Pubs per Project  
Funded: **1.51 Pubs**

Average Time to First Pub:  
**3.4 Years**

Average Journal Impact  
Factor: **4.72**

## CHRP Budget History: Since 1990



# CHRP Overall Budget and Operating Expenses

## FY 2015-16 and 2016-17

Category	Budget Amount: FY 15-16	Budget Amount: FY 16-17
Total CHRP Budget	\$8,753,000	\$8,753,000
Operating Expenses	\$1,203,812	\$1,346,760
Percent Operating Expenses	13.8%	15.4%



# 34 Years of Support for HIV/AIDS Research in CA

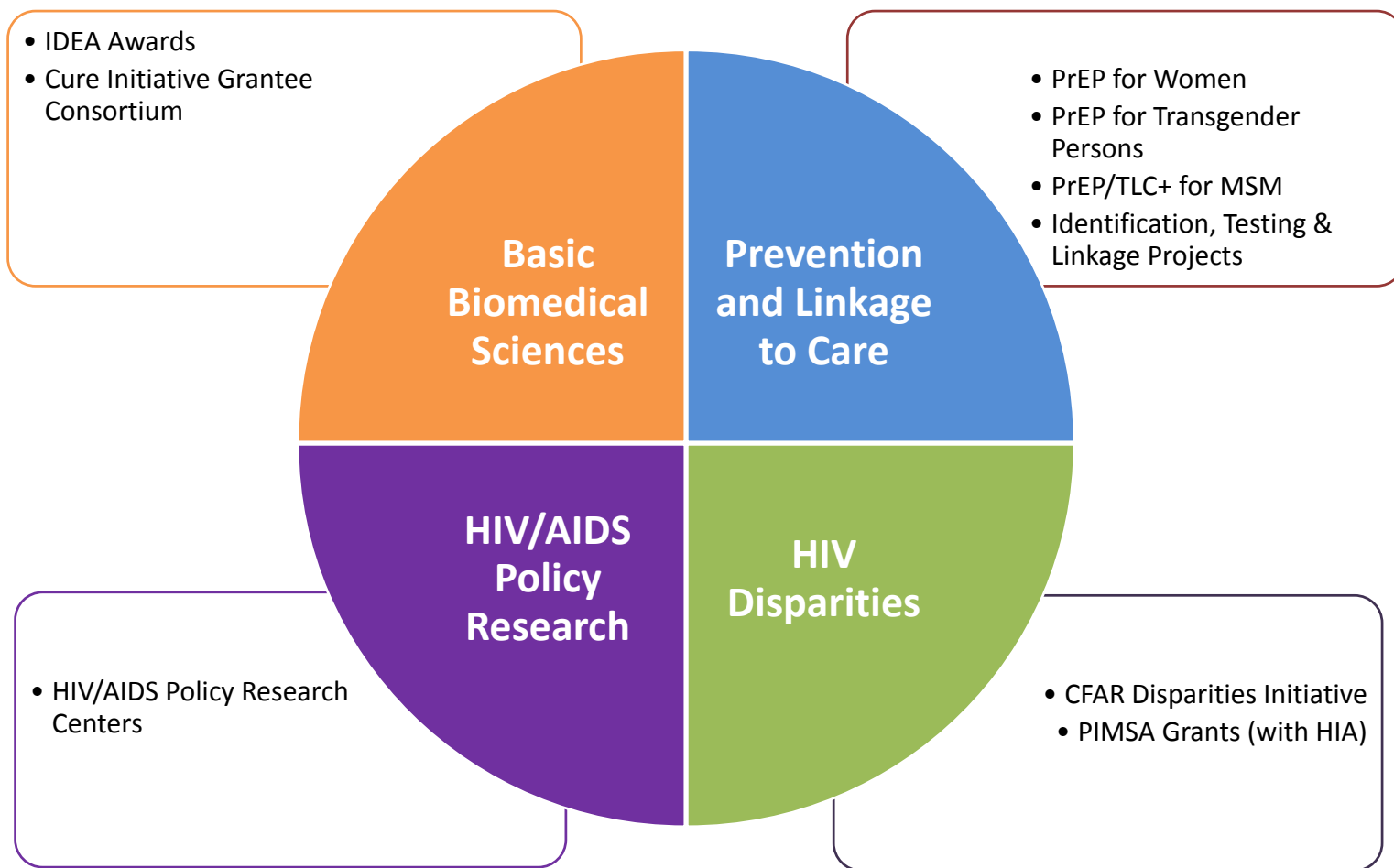
## Portfolio Highlights:

- Among the 1<sup>st</sup> to isolate the HIV virus (Levy)
- Among the 1<sup>st</sup> studies to demonstrate rapid HIV viral production & turnover in humans (Ho)
- 1<sup>st</sup> study to show a rise in drug resistance (Little)
- Community Collaborative Prevention intervention trials led to 2 national evidence-based interventions adopted by the CDC (DiClemente – SISTA; Rotheram – Street Smart)
- 1<sup>st</sup> clinical trial to examine & demonstrate safety & efficacy of kidney & liver transplantation for HIV infected persons (Stock)
- Rapid policy research led to support for OA-HIPP Program & savings in the CA ADAP Program (Morin, Steward, Leibowitz, Curtis, Van Gorder, Mulhern Pearson, et al)
- Policy research which led to a revised federal Ryan White distribution formula & resulted in additional \$ millions of funds for CA (Morin)
- The largest multi-site initiative in the U.S. to test the HIV prevention pill in MSM, women & transgender persons (Morris, Landovitz, Burack, Myers, Sevelius, Liu et al)

# Current Role and Niche for CHRP

- **Address critical big picture HIV/AIDS issues in CA, and foster collaboration across multiple sectors (academia, government, community, industry) to support research to address these issues:**
  - Identify the issues
  - Provide research funding to foster multi-sector and multi-disciplinary collaborations on these issues
  - Convene different sectors to discuss and work together on these issues
  - Seek, when possible, other funding partners to co-support the initiatives
  - Fold support for academic training and career development within the specific initiatives

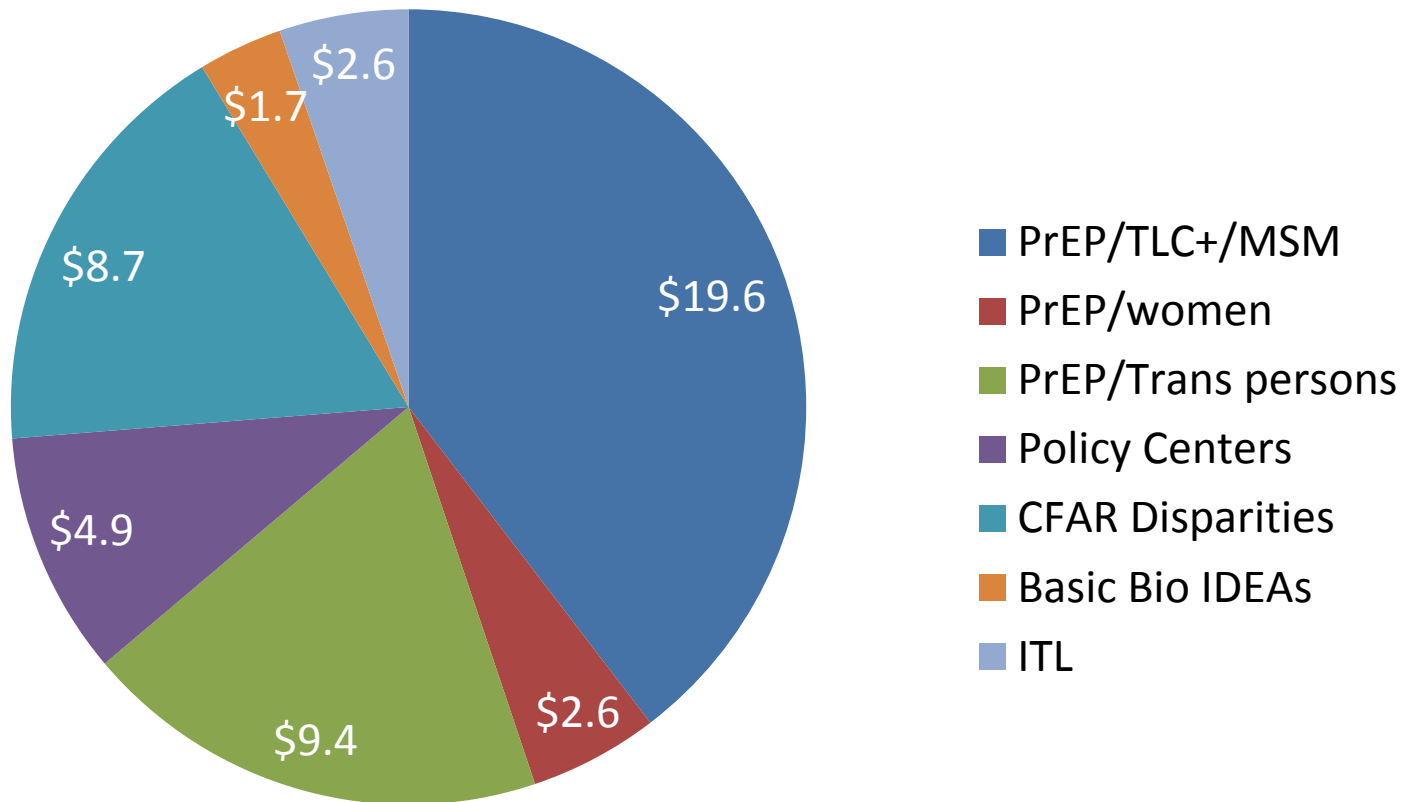
# CHRP 2016-17 Research Initiatives



**CALIFORNIA HIV/AIDS  
RESEARCH PROGRAM**



# Total Budget Expenditures by Life of Initiative (\$millions)



# HIV Prevention: PrEP Projects and Impact

- **PrEP demonstration Projects** – one of the largest projects in the U.S. investigating the use of an HIV prevention pill for **955** men who have sex with men, **700** transgender persons, and **185** women
  - Project locations: Long Beach, Los Angeles, Oakland, Fremont, Sacramento, San Diego, and San Francisco
  - **LA and SD PrEP projects have prevented 95% of expected infections in a study of MSM**

Expected number of people with new HIV infection without CHRP PrEP Project



Observed number of people with new HIV infection with CHRP PrEP Project



**20 infections prevented  
which would save  
\$7.6 million  
in HIV treatment.**



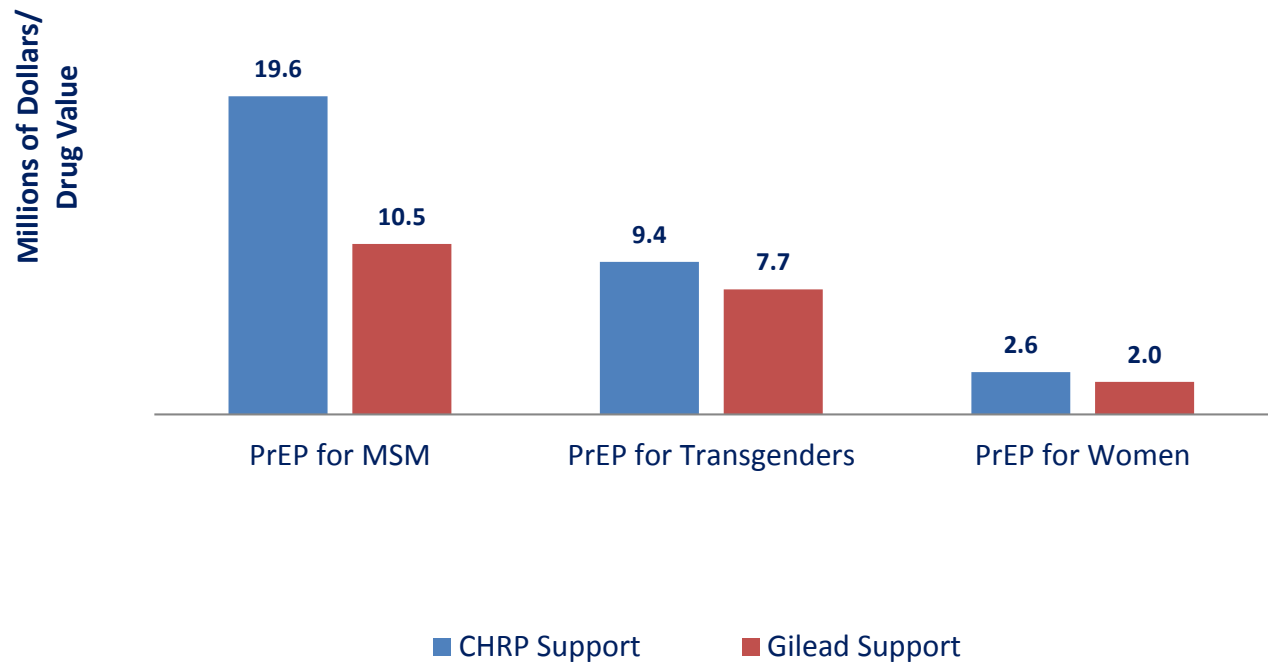
CALIFORNIA HIV/AIDS  
RESEARCH PROGRAM



# HIV Prevention: CHRP PrEP Projects



**CHRP and Gilead Sciences Support for PrEP Demonstration Projects (in millions)**



**\$20 Million Gilead Sciences Drug Contribution**

# PrEP for MSM

- Funded three projects covering Oakland, Los Angeles and San Diego
- Projects started in 2012 and PrEP enrollment has completed (follow-up is complete for the two Southern CA sites)
- Overall initiated nearly 1000 MSM on PrEP
- High retention and adherence rates
- One seroconversion across the three projects
- All projects are collecting and analyzing study roll-off data

# PrEP for MSM - Highlights

- LA County PATH –
  - Racial/ethnic differences in adherence
  - Similar finding to the Liu et al PrEP demo projects
- UCSD ALERT
  - No significant difference in adequate adherence between iTAB texting and Std Of Care (SOC) arms
  - Significantly more perfect adherence in iTAB group compared to SOC



**ARE YOU A  
BLACK OR  
AFRICAN  
AMERICAN MAN  
WHO HAS SEX  
WITH MEN?**

- **ARE YOU HIV-NEGATIVE?**
- **ARE YOU INTERESTED IN TAKING A  
MEDICATION THAT COULD REDUCE YOUR  
RISK OF GETTING HIV?**

If so, you may qualify for a study that is looking at adherence to a medication recently approved by the FDA for preventing HIV infection.

In this study, we hope to learn if text message reminders increase adherence to pre-exposure prophylaxis (PrEP) medication.

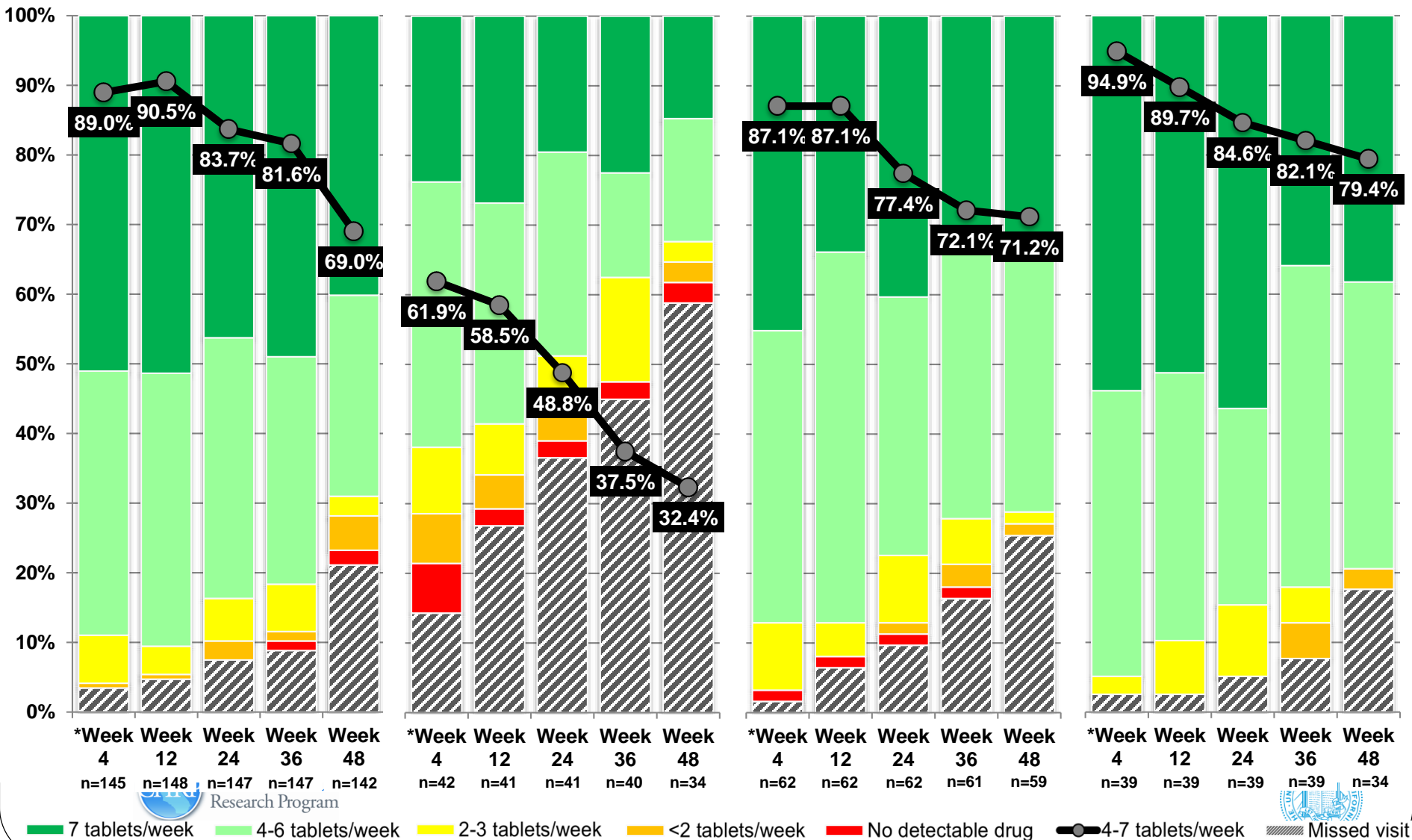
# Tenofovir Diphosphate Concentrations in Dried Blood Spots (Interim Data)

Non-Hispanic White

Non-Hispanic Black

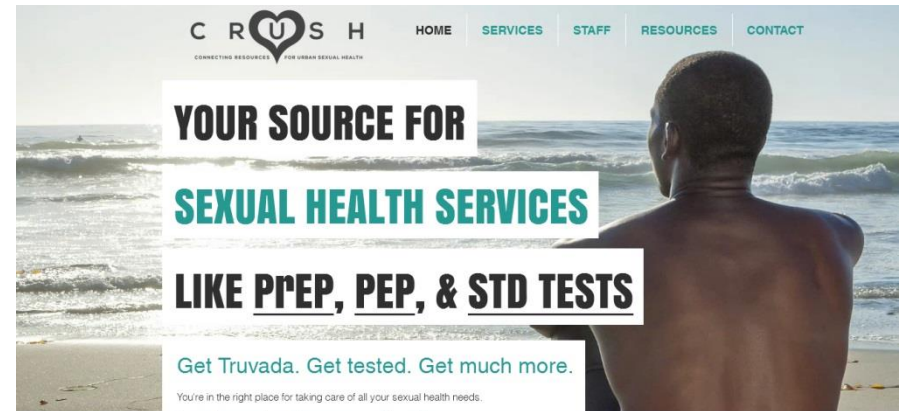
Hispanic/Latino

Mixed/Other



# CRUSH: Lessons Learned (so far) about PrEP for YMSM

- YMSM are very willing to access PrEP.
- PEP/PrEP interplay should be anticipated with protocols and training.
- Retention efforts should be tailored to the specific needs of youth and changing individual risk situations
- YMSM can be highly adherent to PrEP.
- PrEP users are perceptive to patterns of risk.
- Intermittent, risk-driven use of PrEP may be a good option for YMSM.



# PrEP for Women

- Funded two projects covering Oakland, Los Angeles and San Diego
- Only PrEP projects in the US to focus exclusively on women
- 2-year projects started in Fall 2015, ~\$2.6 million
- Overall will initiate 185 women on PrEP
- **Oakland: UCSF and EBAC with Life Long Health Clinic in East Oakland**
  - Unique effort to roll out PrEP in a primary care clinic setting
  - Plan to enroll 50 women
  - 74% are African American, mean age is 37 years
  - Majority report multiple risk factors
  - 96% retention rate so far

# PrEP for Women (2)



**ARE YOU A SEXUALLY ACTIVE WOMAN?**

You may be eligible to participate in a research study. The UCSD AntiViral Research Center is conducting two research studies for women on reproductive health.

**We are researching:**

- HIV prevention methods using Pre-Exposure Prophylaxis (PrEP) and text messaging
- An investigational drug called LACTIN-V that may prevent recurrent bacterial vaginosis or BV

**Eligible participants are:**

- Age 18 or older, born female and currently identify as female
- Sexually active, HIV-negative, and not currently pregnant or breastfeeding

Interested in participating? Call us at (619) 543-8080 and ask about the PrEP or LACTIN-V study. Volunteers who qualify will receive compensation.

**UC San Diego**  
SCHOOL of MEDICINE  
AntiViral Research Center  
220 Dickinson Street, Suite A  
San Diego, CA 92103  
avrc@ucsd.edu  
IRB #151041 & 100023

- **Los Angeles/San Diego**

- Four sites in LA: APLA ,T.H.E. Clinic, Harbor ULCA, USC
- One site in San Diego: UCSD AVRC
- Plan to enroll 135 women across the 5 sites
- Using iTAB adherence intervention



**OWN It!**  
**PrEP for Sex**

PrEP stands for Pre-Exposure Prophylaxis.

PrEP involves taking a pill once a day to help you stay HIV-negative

# PrEP for Transgender Persons

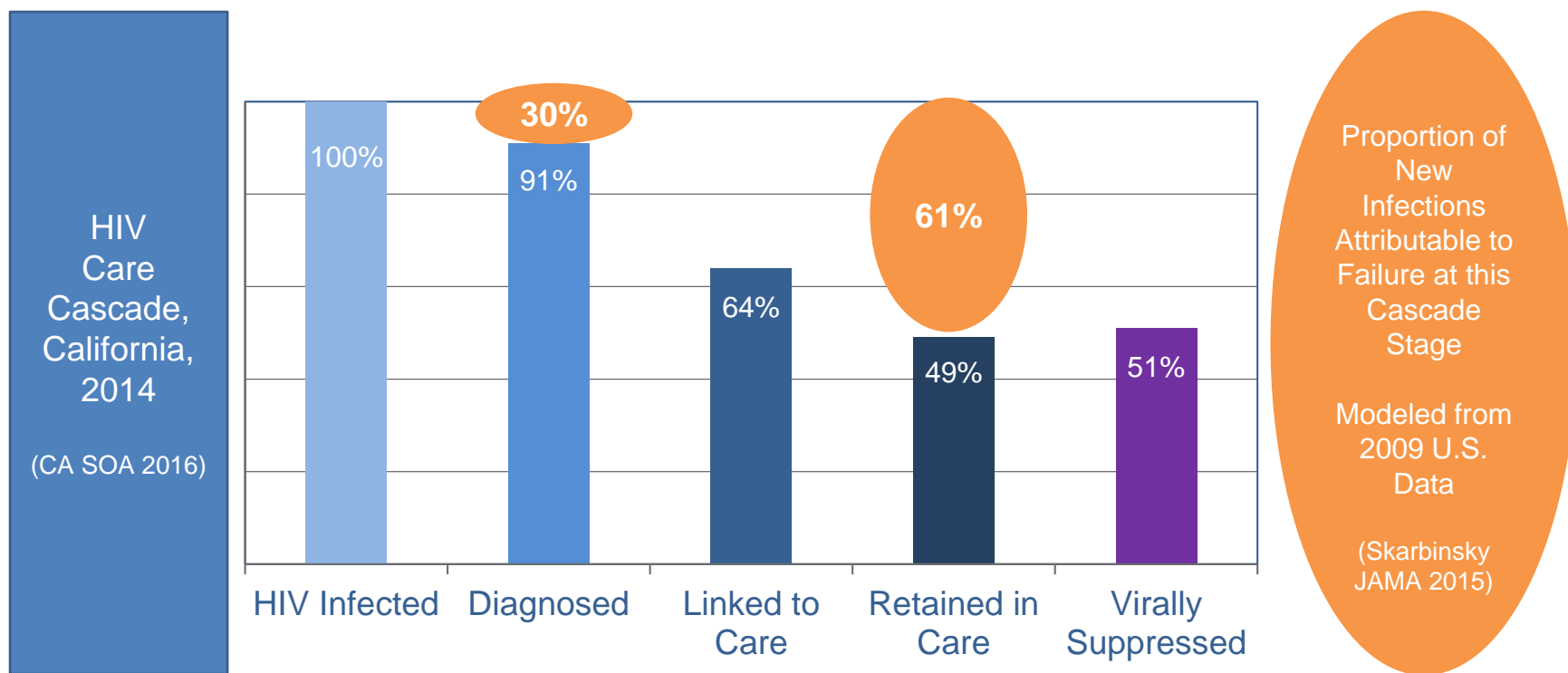
- Funded three projects, 2 in SF, 1 in San Diego starting April 2016
- ~\$9.4 million funded across the three projects
- Covers Oakland, SF, East Bay, Sacramento, Los Angeles and San Diego
- Overall will initiate 750 transgender people on PrEP
- Projects using a variety of interventions to increase awareness, uptake and adherence
- Data warehouse being created for all three sites to facilitate combined analyses
- Currently finalizing agreements with Gilead and IRB processes

# Identification, Testing and Linkage (ITL) Projects

- Funded 3 projects in 2013 focused on finding those who are unaware of their status, getting tested, and linked to prevention or care services
- Three year projects totaling \$2.6 million
- **Bienestar Services:** Latino MSM in Los Angeles
  - App-based recruitment for testing, linkage to prevention and care
- **UCSF:** African American and Latino MSM in Alameda County
  - HIV self test kits, peer testing
- **La CADA , UCLA, Drew:** African American MSM
  - Passport to Wellness and Peer Navigators

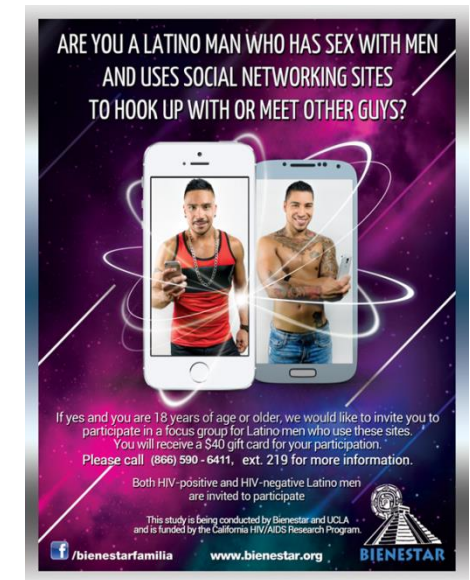
# Why do we target testing and retention in care?

## Care Cascade and **Attributable Fraction** (modeled, biased)



# ITL Projects: Highlighting Bienestar

- For recruitment, used “shouts” and banner ads on Latino friendly MSM websites



Don't let the fear of HIV control your life. Knowledge is power, and to know your HIV status is to have control over your health. Click on the link to get tested for free and find out if you are eligible for a \$30 gift card.

# ITL: Highlighting Bienestar

- Were able to reach large numbers in a short period of time:  
**4,348 eligible Latino MSM**
- Found that “shouts” are much more effective than banner ads – decided to drop banner ads
- 333 of those eligible actually showed up at one of the sites for testing
- However, found a high positivity rate ~2.7% newly diagnosed HIV positive
  - Linked positives to care, re-engaged positives in care
- Working on increasing ratio of eligibles to number tested and increasing reach overall
  - Increasing clinic hours and days
  - Starting to use Instagram – identifying local celebs with large followings and asking them to promote the study through the app

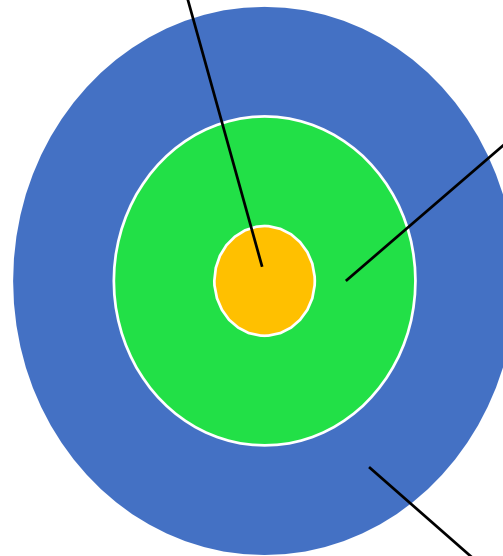
# HIV Disparities: UC Centers for AIDS Research

- The UC CFARs are the first in the nation to have a core dedicated to disparities research
- CFARs will address disparities specific to the different geographic regions of CA
- The CHRP funding is facilitating cross-UC collaboration among the CFARs

**CHRP-Supported  
Disparities Core**

**CHRP-Supported  
Disparities Projects**

**NIH-Supported CFAR**



**Center for AIDS Research**  
UNIVERSITY OF CALIFORNIA, SAN DIEGO



 **CFAR** Center for AIDS Research  
University of California San Francisco  
Gladstone Institute of Virology & Immunology



# HIV Disparities Structure



Disparities Core



Black HIV+ young MSM  
who are not in care

Homeless youth  
who are not tested



Disparities Core



Black HIV+ adults  
who are not adherent to ART

HIV+ women  
who are not in care



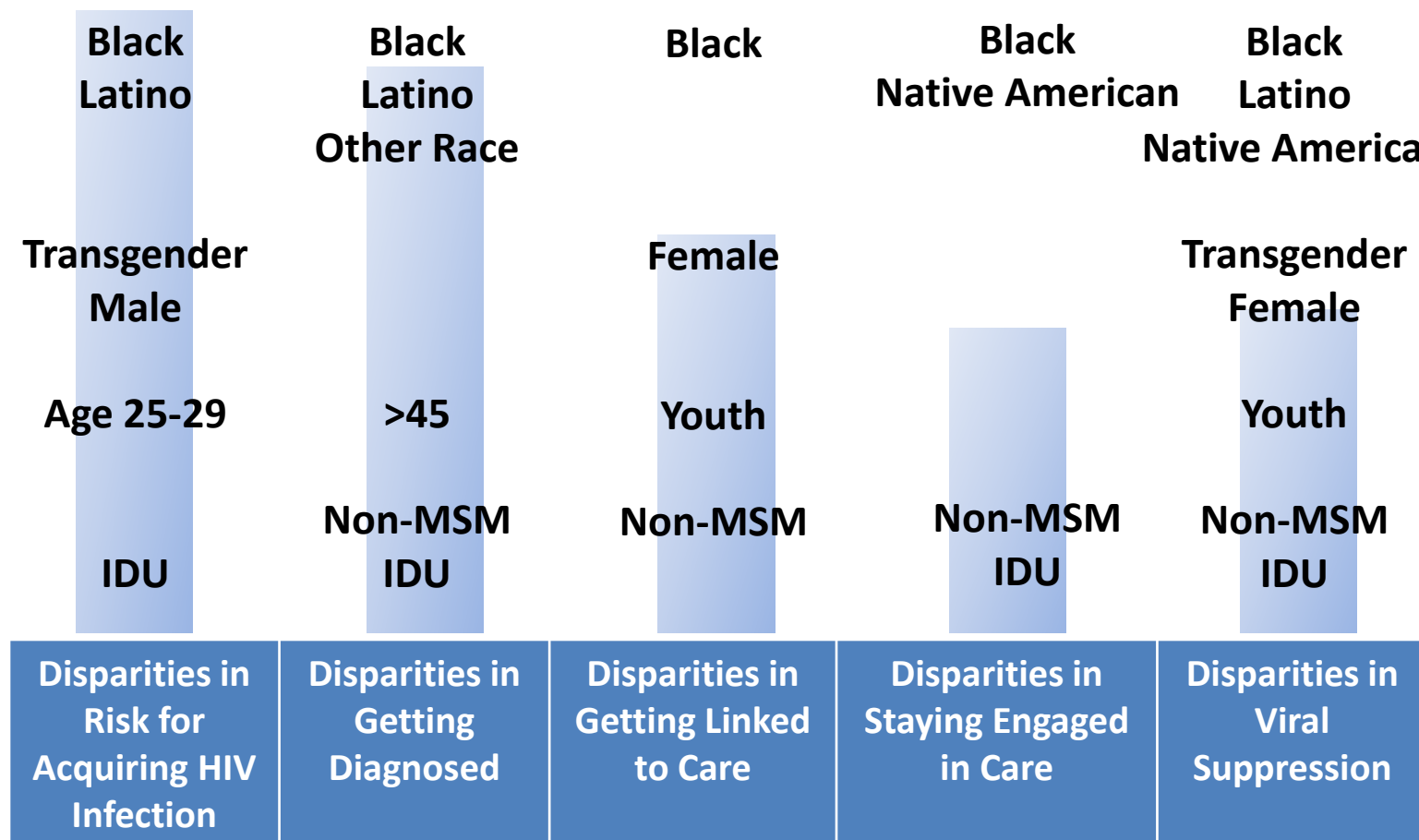
Disparities Core



HIV+ youth w/substance abuse  
who are not in care

Black GBT youth  
who are not tested

# Health Disparities Along the Continuum, 2014



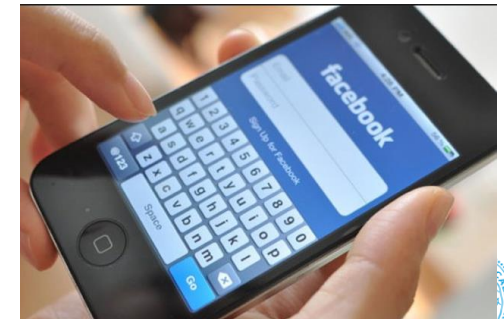
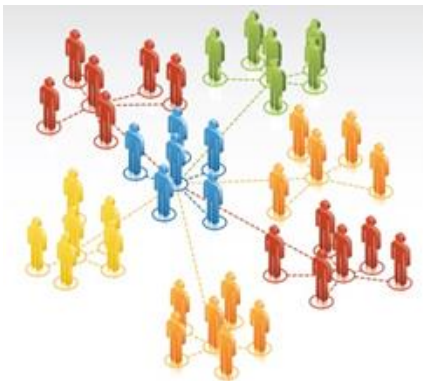
# UCLA Project 1

Eric Rice (USC)



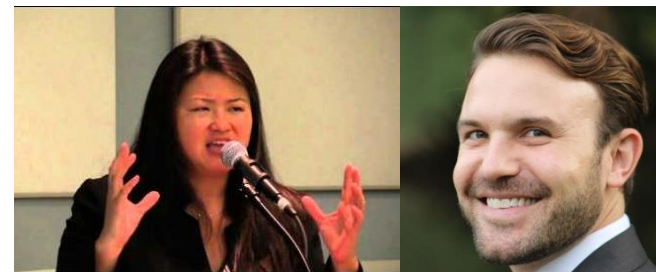
## *Using Artificial Intelligence to Deliver an HIV Testing Promotion App*

- Homeless youth, N = 900
- My Friend's Place (Hollywood); Safe Place for Youth (Venice)
- RCT using community-based participatory research
- Innovations:
  - Facebook-based program to find networks of homeless youth
  - Algorithm to nominate peer change agents
  - N=45 are trained to deliver testing intervention via Facebook
- Outcome: Improved HIV testing rate



# UCLA Project 2

Ian Holloway and Ayako Miyashita



## *Social Work & Legal Case Management (SW/LCM) via Mobile App*

- Black HIV-Positive MSM Under 30, N = 308
- AIDS Project LA; JWC Hospital Institute; LA HIV Law and Policy Project
- Develop SW/LCM app, then clinical trial
- Innovations:
  - Providing social work and legal case management in support of HIV health
  - HealthMindr app
  - In-person recruitment at bars, then geosocial networking for snowball recruitment
- Outcome: Improved viral suppression rate



# UCSD Project 1

David Moore



## *Individualized Texting to Reduce Disparities in HIV Care (iTAB-Disparities)*

- Black HIV+ persons who need improved viral suppression, N = 121
- Family Health Centers of San Diego
- Adapt iTAB to serve this population, then test
- Innovations:
  - iTAB for two-way text messaging
  - This technology in this population
- Outcome: Improved viral suppression rate

### Example: Adherence Barriers

“My biggest problem was **losing track of time**, you know, and so I would have them but I may take it, you know, 12 hours and then 36 hours and that kind of deal, but I always adhered. It was just **very sloppy**, you know, **while I was using** that weekend. So, that was my biggest issue.”

### Stems of personal reminder messages reflect different themes:

- |  |  |
|--|--|
| » <b>Celebrate Health</b> <ul style="list-style-type: none"><li>• Stay healthy! It's time 2 take ur meds, pls take ur...</li></ul>     | » <b>Empowering</b> <ul style="list-style-type: none"><li>• It's med time, only u can control this. Rmber 2 take ur...</li></ul> |
| » <b>Time and Focus</b> <ul style="list-style-type: none"><li>• It's pill time! Take ur...</li></ul>                                   | » <b>Importance of Adherence</b> <ul style="list-style-type: none"><li>• Adherence is impt. Pls take ur...</li></ul>             |
| » <b>Control Disease</b> <ul style="list-style-type: none"><li>• Taking ur meds helps control ur disease. Rmber 2 take ur...</li></ul> |  |

# UCSD Project 2

Jamila Stockman, Erin Falvey



## *EmPower Women: Enhanced Peer Navigation to Improve HIV Care for Women*

- Women with HIV who are not in care, N = 100
- Christie's Place (only AIDS service organization for women in the US)
- Develop intervention (peer navigators, personalized texting, support group), then clinical trial
- Innovations:
  - Gender- and syndemic-responsive (i.e., women facing multiple problems that interact synergistically to contribute to poorer HIV treatment outcomes -- such as substance use, mental health, trauma, intimate partner violence)
  - Proximate target is to build skills for coping with syndemic-related **affective distress**
- Outcome: Improved in-care rate

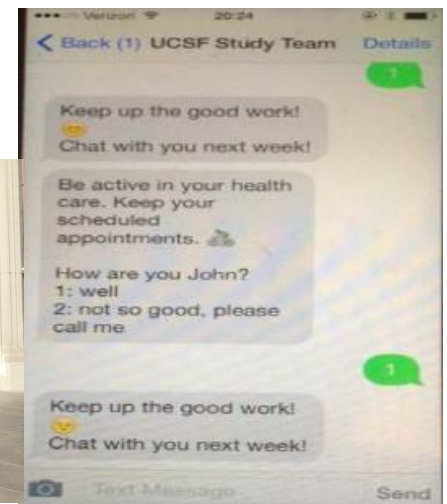
# UCSF Project 1

Carol Dawson-Rose and Parya Saberi



## *Youth to Text/Telehealth for Engagement in HIV Care (Y2TEC)*

- HIV+ youth with substance abuse who are out of care, N = 150
- Larkin Street Youth Services, ZSFGH/Ward 86
- Sequential, Multiple Assignment, Randomized Trial (SMART design)
- Innovations:
  - Adapt SBIRT model (screening, brief intervention, ref to tx) to include HIV care
  - Brief intervention, motivational interviewing
  - Personalized texting, telehealth conference
- Outcome: Improved in-care rate



# UCSF Project 2

Emily Arnold

## *We Are Family – The House Ball Community*

- Black GBT youth in Gay Houses, N = 120
- Cal-PEP and Project Safe Trade
- Formative research, develop app, test
- Innovations:
  - Accessing a hidden population via family based group sessions
  - Focus on stigma
- Outcome: Improved testing rate



Going Vogue: Fighting HIV in L.A.'s Emerging Ball Community



*I feel like a real mother because it's like gratitude, 'Oh my God, he had a good night, he won the trophy he wanted,...or whatever. We all got together and became a family', not just for the Ball but to help each other out and that kind of stuff is rewarding.*





# PIMSA: Research Programs on Migration and Health

- **Collaborative effort between:**
  - Mexican Secretariat of Health (SSA)
  - National Council of Science and Technology (CONACYT)
  - Health Initiatives of the Americas (HIA) at UC Berkeley
  - Other UC programs
- **2016 grant cycle**
  - 15 submitted proposals (+9 graduate student proposals)
  - 4 HIV-specific proposals
  - 2 HIV-specific proposals were selected for funding

# PIMSA: Funded Projects

- **Mexican migrant MSM, sexual networks, and HIV prevention hotspots in San Bernardino County**
  - UCSB & Mexican Ministry of Health
  - Award: \$30,000
- **HIV Access to Prevention and Care: Assessment of Latino Immigrant Laborers in Rural California**
  - SF State University & Universidad Autónoma de Zacatecas
  - Award: \$30,000

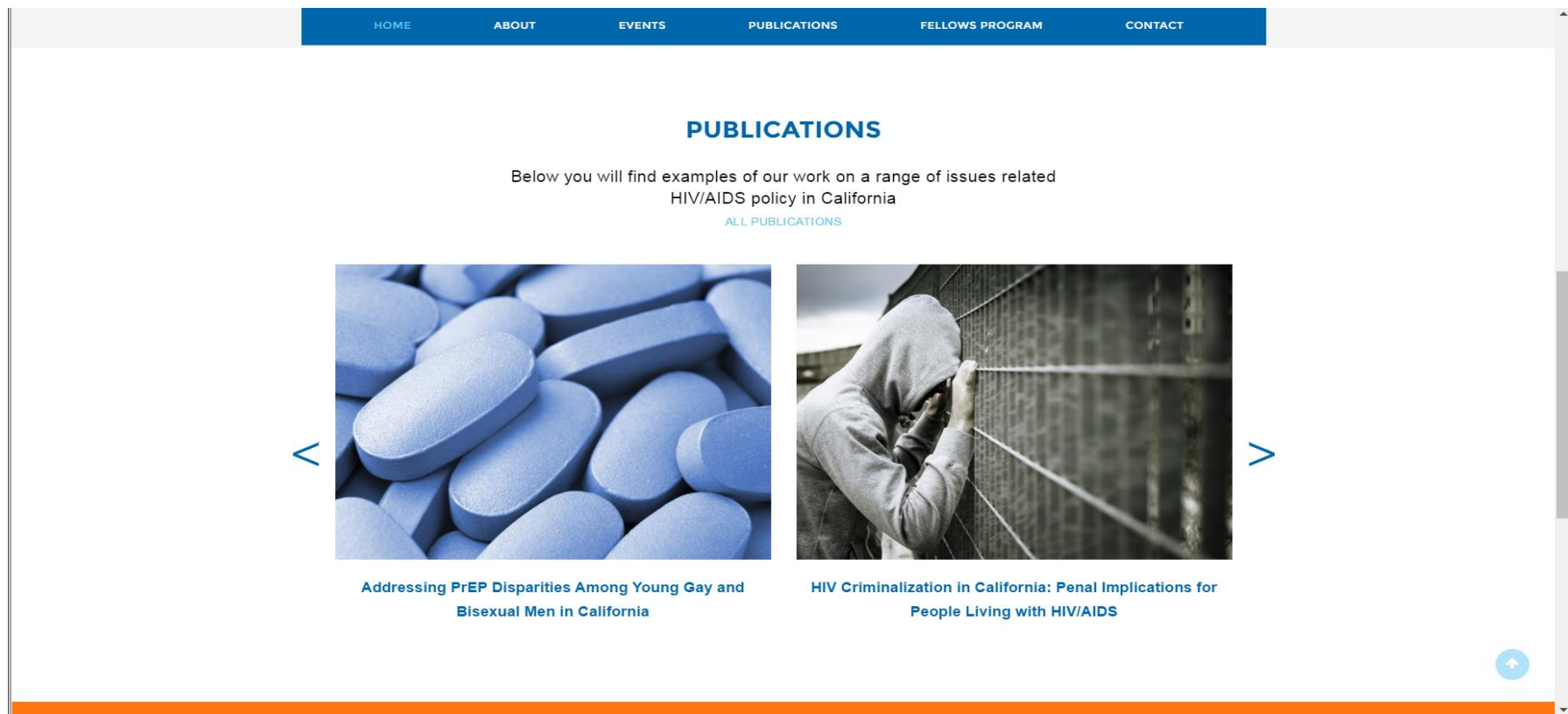
# HIV/AIDS Policy Research Centers

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# Policy Centers: Collaborative Efforts

- **Policy Center Website:** <http://chprc.org/>
  - Infographics, Policy Briefs, Fellows Call



# Policy Centers: Collaborative Efforts

- **Community Input Meetings**

- October 19<sup>th</sup> & 25,<sup>th</sup> 2016

- **Think Tanks**

- Maintaining Care & Coverage in an Altered Health Care Landscape (3/14/17)
- Best Practices for Trans HIV Prevention & Care (4/6/17)

- **Fellows Program**

- Call for applications released Nov 1
- Fellows to start March 2017
- Each center will host 3 fellows for 2 years per call
- Total of 12 fellows at the end of the grant period

# Policy Centers: Rapid Response

- **Addressing PrEP disparities among young gay and bisexual men in CA**
  - 9.6% of respondents reported using PrEP in 2015
  - Higher use among white respondents than Latino or African American respondents

WE SURVEYED OVER 600 YOUNG GAY AND BISEXUAL MEN IN CALIFORNIA ABOUT PREP



CALIFORNIA  
HIV/AIDS POLICY  
RESEARCH CENTERS

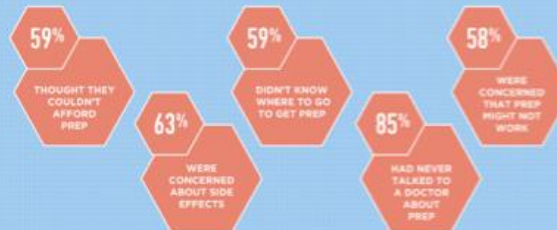
**Blacks and Latinos were less likely to have used PrEP than whites**

The CDC estimates that if current rates persist, half of all black—and a quarter of all Latino—gay and bisexual men could be infected with HIV in their lifetimes.

PrEP is a once-daily pill that is over 90% effective in preventing HIV



WE ASKED YOUNG GAY AND BISEXUAL MEN WHAT WAS STOPPING THEM FROM USING PREP



Blacks and Latinos felt there were more obstacles to taking PrEP than whites



HOW CAN WE INCREASE PREP USE AMONG YOUNG GAY AND BISEXUAL MEN IN CALIFORNIA?

1

TARGETED CAMPAIGNS TO EDUCATE YOUNG GAY AND BISEXUAL MEN ABOUT PREP, ESPECIALLY AMONG BLACKS AND LATINOS



2

PATIENT NAVIGATORS TO HELP YOUNG GAY AND BISEXUAL MEN ENROLL IN HEALTH INSURANCE AND FIND AN EXPERIENCED PREP PROVIDER



3

STATE FINANCIAL ASSISTANCE TO HELP PAY FOR PREP AND PREP-RELATED MEDICAL COSTS



TO READ THE FULL REPORT, VISIT OUR WEBSITE:

[CHPRC.ORG](http://CHPRC.ORG)



California **HIV/AIDS**  
Research Program



# Policy Centers: Rapid Response

## • Out-of-Pocket Cost for Individuals Accessing PrEP Through Covered California Health Plans

Table: Summary of Estimated Annual PrEP Costs by Metal Level (not including premiums)

Metal Level	Out-of-Pocket Maximum <sup>1</sup>	Medical Deductible <sup>2</sup>	Pharmacy Deductible <sup>2</sup>	Preferred Drug Copay <sup>2</sup>	Primary Care Visit Copay <sup>4</sup>	Laboratory Test Copay	Estimated Annual PrEP Costs <sup>5</sup>	Estimated Annual PrEP Costs with Gilead Copay Card <sup>5</sup>
<b>Bronze</b>	\$6,800	\$6,300	\$500	100% up to \$500 per script	\$75 (deductible applies after 1st three non-preventive visits)	\$40	\$6,800	\$3,200
<b>Silver</b>	\$6,800	\$2,500	\$250	\$55	\$35	\$35	\$1,205	\$350
<b>Enhanced Silver 73</b>	\$5,700	\$2,200	\$250	\$50	\$30	\$35	\$1,125	\$325
<b>Enhanced Silver 87</b>	\$2,350	\$650	\$50	\$20	\$10	\$15	\$395	\$125
<b>Enhanced Silver 94</b>	\$2,350	\$75	\$0	\$10	\$5	\$8	\$185	\$65
<b>Gold</b>	\$6,750	\$0	\$0	\$55	\$30	\$35	\$985	\$325
<b>Platinum</b>	\$4,000	\$0	\$0	\$15	\$15	\$20	\$355	\$175

<sup>1</sup>PrEP costs may be less if out-of-pocket maximum is reached.

<sup>2</sup>Costs are calculated assuming medical and pharmacy deductibles have not been met.

<sup>3</sup>Truvada<sup>®</sup> is currently covered by all Covered California health plans and is listed as a Tier 2, "preferred" drug. Drug formularies can change at any time, so always verify medication coverage directly with a health plan before enrolling.

<sup>4</sup>Out-of-pocket costs may be higher if you are required to see a specialist instead of a primary care doctor. Costs are calculated assuming the cost of a primary care visit is \$200, but that amount may vary from plan to plan.

<sup>5</sup>Cost estimates include five doctor visits and five labs during the first year of PrEP initiation to account for the initial visit, a one-month follow-up visit, and then three additional follow-up visits every three months for the duration of the year. Cost estimates do not include the cost of monthly premiums.

### Summary

PrEP is a highly effective medication for preventing HIV. Those interested in PrEP and enrolling in a Covered California health plan should carefully weigh the costs of a Truvada<sup>®</sup> prescription, copays for regular doctors' visits and laboratory tests, and monthly premiums. With Gilead's copay card, PrEP is affordable (less than \$400/year) on all Covered California health plans except Bronze plans. However, this does not include the cost of monthly premiums and assumes that medical and pharmacy deductibles have not been met. You can use Covered California's shop and compare tool to see the cost of premiums in your area at [CoveredCA.com/shopandcompare](https://CoveredCA.com/shopandcompare). Certified Enrollment Counselors and Insurance Agents, as well as Covered California call center representatives are also available to answer questions about financial assistance and help you compare plans. You can find free, in-person help at [CoveredCA.com/get-help](https://CoveredCA.com/get-help). Before you make any final decisions be sure that the primary care doctor you are considering takes the plan you want and is willing to prescribe PrEP. A list of doctors with experience providing PrEP can be found at [PleasePrepMe.org](https://PleasePrepMe.org).

To learn more visit [CHPRC.org](https://CHPRC.org).

## CHRP Impact – Policy Centers

### PROPOSAL TO MANDATE CONDOM DISTRIBUTION IN PRISONS WOULD REDUCE CORRECTIONAL

In response to a newly released report on the pilot program that evaluated condoms distribution in one of the four Solano State Prison facilities, California Assembly Member Rob Bonta recently proposed AB999, which would require the California Department of Corrections and Rehabilitation (CDCR) to develop a five-year plan to make condoms available in all California prisons. AB999 would instruct CDCR to use funds from its budget to provide condoms and condom dispensing machines at all California prisons by December 2019. It would encourage facilities to consider also allowing prisoners to...



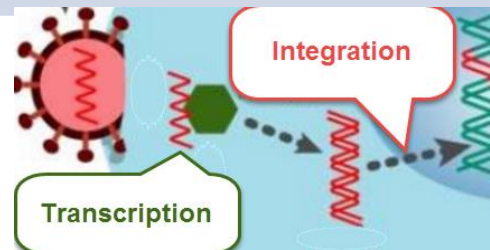
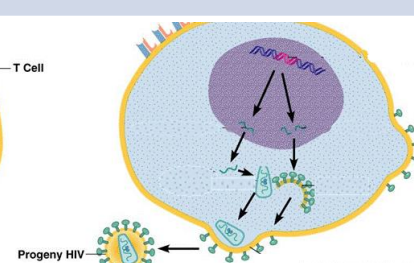
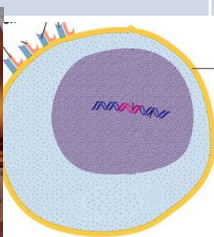
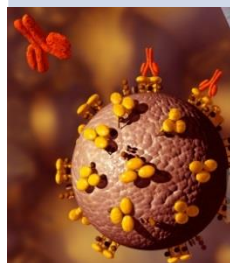
**Governor Brown signed AB 999 requiring the CA Department of Corrections and Rehabilitation to develop a 5 year plan to distribute condoms in all state prisons**

# CHRP Basic Biomedical Science Historical Award Mechanisms

	2013	2015
Training (Dissertation, Post-Doc) <ul style="list-style-type: none"> <li>• \$50-100k direct per year over one-two years</li> </ul>	N=9	0
IDEA – Innovative Developmental Exploratory Award <ul style="list-style-type: none"> <li>• \$160k direct per year over two years</li> </ul>	N=6	N=9
TOTAL	15 Awards:  11 comprise the <b>HIV Cure Initiative</b>	9 Awards

# HIV Cure Initiative of 2013 – Results in 2016

Investigator (Site)	Scientific Result
Battivelli (Gladstone)	Showed why cells become latently vs actively infected
Boehm (Gladstone)	Identified three new drug targets
Burnett (City of Hope)	Developed a “smart bomb” to annihilate HIV
Fujinaga (UCSF)	Demonstrated novel host factors for transcription
Glaunsinger (UCB)	Proved that 7SK is ...essential for HIV transcription
Hartigan-O'Connor (UCD)	Showed that depleting CD4+T cells via mABs boosts functional cure
Kamata (UCLA)	Developed a chimeric antigen receptor
Llewellyn (USC)	Quantified latency; developed anti-HIV CRISPR/Cas9
Mendez-Lagares (UCD)	Showed microbiota effects on Th17/Treg axis
Pak (UCSF)	Validated a new cure target (cyclin dependent kinase-11)
Yang (UCLA)	Attempted chimeric t-cell receptors for gene therapy





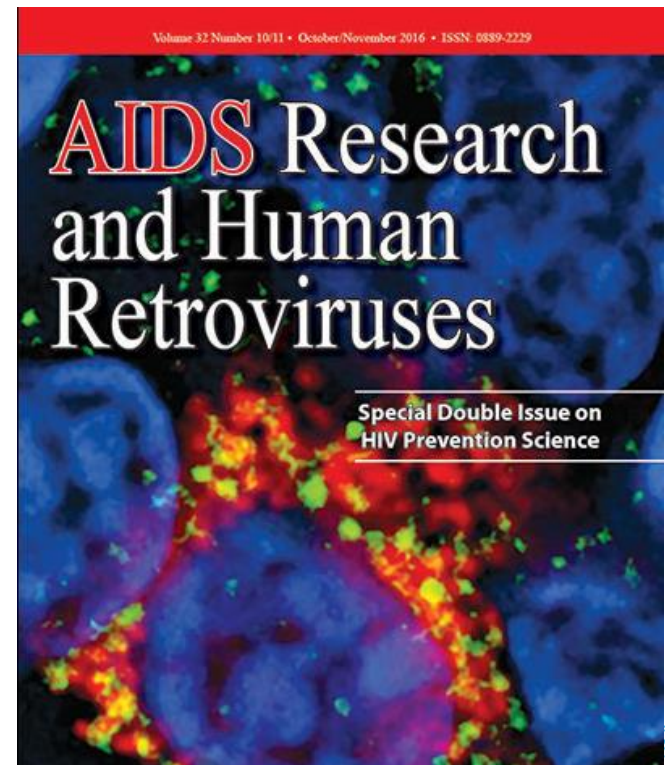
# Cure Initiative Dissemination

## Consortium Meeting in May 2016

- Investigators agreed to collaborate on dissemination

## Dedicated journal issue for HIV Cure Initiative in 2017

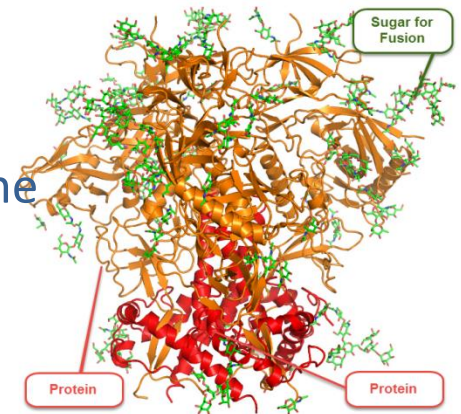
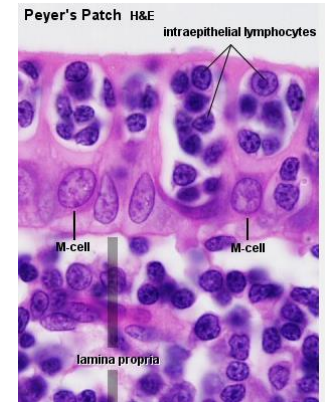
- Eight articles are bundled, fast-tracked (~4-6wks)
- CHRP pays publication and open access fees



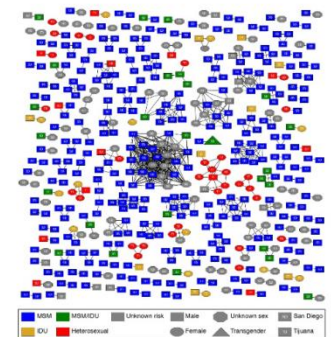
# 2015 Basic Bio Awards

- CD28 receptors and AIDS lymphoma
  - Giorgi Award to Daniel Widney, new investigator
- Latent T-cells that live in the gut
- Visual images of HIV infecting host tissues in real time
- Vaccine amplification via CMV
- Engineered T-cells with chimeric antigen receptors
- Cluster analysis of viral genotyping to find hotspots

Also accessory proteins, persistence, reactivation



Map of the Observed San Diego – Tijuana Transmission Network



# New Initiative: “One Step Ahead”

## Rationale

- Need to foster continued leaps forward in HIV research
- Stimulate creativity of California investigators by offering a broadly open call with significant resources

## Goals

- Fund innovative and highly meritorious projects **that impact the current paradigm and move the field “one step ahead”**
- Facilitate visionary research in HIV science that significantly impacts the HIV epidemic in California

# One Step Ahead: Overview

- Initiative total: up to **\$7.5 Million** over 4 years
- Anticipate funding 3-5 projects
  - # of awards will depend on peer review outcome
- \$100k/year up to \$750k/year in direct costs
  - Project duration from 1 to 4 years
- 76 LOIs received 3/15/17 (under current review)
  - Up to 50 LOIs will be invited to submit full applications