Current HIV Enterprise at UCSF

Over the past three decades, UCSF has consistently engaged in the search for solutions to the global HIV/AIDS crisis. In creating a vibrant and nimble clinical and research enterprise, it positioned its investigators at the forefront of the evolving landscape, and supported multidisciplinary teams capable of moving the needle on the field’s most pressing questions.

In doing so, UCSF has emerged as a leader in diverse and impacting areas of research and practice, such as HIV cure; prevention and disparities reduction; basic and translational science; treatment and implementation advances; and international care and research. Below are just a few examples of the considerable gains made across UCSF and our affiliates:

- **Cure**: UCSF’s leadership in the DARE [1] (*Delaney AIDS Research Enterprise*) and CARE [2] (*Collaboratory of AIDS Researchers for Eradication*) Collaboratories, and the establishment of the amfAR HIV Cure Research Institute [3], have dedicated substantial financial and research resources to the search for a cure.

- **Prevention**: Researchers from UCSF have taken the lead in HVTN [4] (*HIV Vaccine Trials Network*), and HPTN [5] (*HIV Prevention Trials Network*) studies, and with the Department of Public Health have led the Getting to Zero [6] campaign and Bridge HIV [7], all of which focus on robust clinical-social/behavioral interventions to curb the transmission of HIV. The highly regarded iPrEx (Pre-exposure Prophylaxis Initiative) study, proving the value of pre-exposure prophylaxis leading to FDA approval of and CDC guidance of the use of PrEP in the United States, was led by Gladstone Institutes [8] Senior Investigator and UCSF Professor Dr. Robert Grant.

- **...and Disparities**: The NIMH-funded Center for AIDS Prevention Studies [9] (CAPS), the largest university-based research center in the world dedicated to social, behavioral, and policy science approaches to HIV, focuses resources on partnering with local organizations working with vulnerable populations, and the Health Disparities Core of the Center for AIDS Research [10] Supports emerging investigators in this area specifically. To better understand the gender dynamics of the epidemic, the Women’s HIV Program at UCSF [11] provides interdisciplinary, culturally sensitive, comprehensive clinical care that fosters community; it has also been recognized as a national advocacy leader in responding to the health impacts of trauma. Since 1993, the Northern California location of the NIH-funded Women’s Interagency HIV Study [12], a longitudinal study dedicated to learning
about the evolving health of women living with HIV in the U.S., has enrolled 680 Bay Area women at 4 clinical sites in San Francisco and Oakland managed by UCSF investigators. The need for broad accessibility to information is addressed by the Center for HIV Information [13], one of the most trafficked HIV information sites on the internet targeted to lay audiences, and housed within the VA [14].

- **Basic and Translational**: The official partnerships UCSF maintains with the Gladstone Institute of Virology and Immunology [15] and Vitalant [16] help drive basic and translational science research, further complemented by the Division of Experimental Medicine [17] and many labs dedicated to specific pathogenesis and immunodeficiencies research. The development of novel assays, application of innovative specimen processing, and integration of infectious disease research are the nucleus of these groups. UCSF researchers can access the SCOPE [18] and OPTIONS [19] Cohorts at the Zuckerberg San Francisco General Hospital [20], and the UARTO Cohort [21] in Mbarara, Uganda, providing clinical data and biological specimens, banked or in real time, for exploratory translational research studies. The wealth of population-based data paves the way for greater understanding of how HIV-positive persons manage the disease across the lifespan, including immune activation, cardiovascular risk and treatment intensification, and low-level viremia. The CTSI [22] (Clinical and Translational Science Institute) a robustly interdisciplinary group, works with HIV investigators to translate promising clinical research ideas into successful protocols across 6 sites in the Bay Area. Finally, the AIDS Specimen Bank [23], a large-scale repository, processes on average 25,000 specimens a year for research and clinicians addressing a myriad of research questions.

- **Treatment and Implementation**: Many centers and departments address multiple areas of training and implementation. The Center for AIDS Research [10] (CFAR), one of three top tier NIH-funded research centers in the country, operates 6 Cores (Clinical and Population Sciences, Virology, Immunology, Pharmacology, the AIDS Specimen Bank, and the Health Disparities Core) supporting over 300 HIV researchers and clinicians domestically and abroad, addressing co-morbidities, cure, treatment adherence, drug interaction, and surveillance. T

  - The Division of HIV, Infectious Diseases, and Global Medicine, [24] the home of the world’s first HIV clinic, Ward 86, and the hub of HIV clinical care at UCSF, serves a diverse 2,600 patients over 28,000 clinical visits a year in their many clinics (HIV Primary Care [25], Hepatitis C Clinic [26], Women’s Clinic [27], Latino Clinic [28], PrEP Clinic [29], Adolescent Clinic [30], the RAPID program to initiate immediate treatment, the PHAST [31] program to link and retain patients in interdisciplinary care, Infectious Disease Clinic, Drop-in Clinic, Pulmonary Clinic, Anal Dysplasia Clinic, substance use [32] counseling services, and the Golden Compass [33] program for older patients), and by engaging them in research (AIDS Clinical Trials Group [34]).

- **International Work**: International HIV care and research have made significant strides in recent years, and UCSF has played a key role. The Department of Epidemiology and Biostatistics
The Bixby Center for Reproductive Health, and researchers affiliated with CAPS, CFAR, the AIDS Education and Training Center, and ARI have all launched successful care and treatment projects, intervention studies, and capacity building partnerships in developing countries. UCSF’s continuing presence and developed infrastructure has allowed for the hosting of collaborative symposia highlighting the work of emerging African investigators. With Makerere University in Kampala, Uganda, Dr. Diane Havlir launched the SEARCH project, an ambitious intervention in 32 communities in Uganda and Kenya that has enrolled over 320,000 participants exploring the effects of early treatment on both health and economic outcomes. Finally, UCSF’s well-regarded Global Health Sciences program has taken the lessons learned in San Francisco and implemented them around the world for over thirty years. We conduct research, build capacity in scientists and healthcare personnel, improve data monitoring and use, provide technical assistance to governments, and much more.

Of increasing importance, UCSF has made a commitment to engaging meaningfully with its locally based partners, and by extension, the communities we all serve. The local HIV epidemic presents persisting challenges. Serious disparities exist in the most at-risk populations in the San Francisco area, including communities of color and transgender communities. Via numerous channels, UCSF has for years worked closely with the SFDPH and the San Francisco AIDS Foundation, but we now focus our efforts on reversing high transmission rates and eliminating barriers to diagnosis and access to care among vulnerable populations. To address these specifically, our latest community-based partnerships include connecting researchers and clinicians to the AIDS Project East Bay, the East Bay AIDS Center, the Alameda County Public Health Department, and Larkin Street Youth Services.