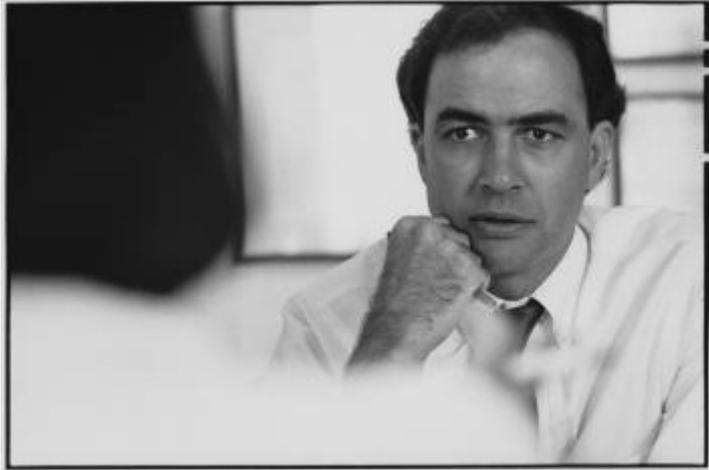


The History of AIDS at UCSF



On Paul Volberding's first day as chief of oncology at San Francisco General Hospital (SFGH), a veteran cancer specialist slapped him on the back, pointed to an examining room, and told him, "There's the next big disease waiting for you." A patient with *Kaposi's sarcoma*.

A rare skin cancer characterized by purple lesions, KS was traditionally found in elderly Jewish and Italian men. Here in San Francisco, it was suddenly being diagnosed in young gay men. It was just one of the diseases to present itself in a string of many conditions seen in gay men in San Francisco, New York and Los Angeles in the early 1980s. Physicians and researchers soon realized that the one thing that tied all the men together was that they were immune-suppressed. They were afflicted with what came to be called Acquired Immune Deficiency Syndrome?AIDS.

Hundreds, then thousands were dying within weeks of diagnosis

As an epidemic that started in gay men, AIDS was stigmatized, and its treatment and research met a lot of resistance from the establishment at UCSF. But for the clinicians who first encountered AIDS, the need of their patients was greater.

To help alleviate their suffering, Volberding teamed up with dermatologist Marcus Conant, infectious disease specialist Constance Wofsy and fellow oncologist Donald Abrams. They created an outpatient clinic?Ward 86 ^[1]?and an inpatient special care unit?Ward 5B, both at SFGH, the first such wards in the country specifically for AIDS patients.



UCSF scientists began to discover more about this perplexing disease. John Greenspan was an oral biologist and pathologist; his wife, Deborah, a dentist. In her clinic she started seeing many patients with an odd form of leukoplakia or candidiasis, commonly known as thrush. She treated it, but it didn't go away. One night she said to John, "What do you think it could be?" He said, "Biopsy it for me and I'll take a look." The samples revealed an entirely new disease. They called it hairy leukoplakia, another disease associated with AIDS.

In 1983 virologist and immunologist Jay Levy met his first patient with KS. He says, "We had been looking for a human virus that causes cancer." Instead, he ended up co-discovering the human immunodeficiency virus (HIV) that causes AIDS.

While scientists searched for a vaccine or treatment for the new virus, Tom Coates, then a researcher at UCSF, recognized a more immediate need in prevention. Together with doctors Steve Hulley, Susan Kegeles and Leon McKusick, he founded the Center for AIDS Prevention Studies [2] in 1986 to improve the practice and policy of HIV/AIDS prevention.

Eventually, effective treatments for HIV were discovered



In 1990 UCSF structural biologist Charles Craik identified the structure of HIV protease, a finding that led to the development of many successful anti-HIV drugs keeping people alive today. Craik's discovery literally changed the course of the epidemic.

Since HIV was found initially mainly in gay men, many thought it wouldn't have much impact

on women or children. As time went on, however, increasing numbers of women and children were diagnosed. UCSF physicians Ruth Greenblatt and Diane Wara played integral roles in treating in these populations.

The HIV-positive women Greenblatt was seeing were mostly poor and poorly educated and had a different set of needs from the male HIV patients at UCSF. She founded the Women's HIV Program at UCSF [3] and the Women's Interagency HIV Study [4] to investigate the impact of HIV infection on women in the US.

Wara introduced the idea that if HIV-positive pregnant women were given one of several anti-HIV drugs just before delivery, they would almost certainly give birth to babies who were HIV-free. Since then, the birth of HIV-positive infants in San Francisco has been virtually unheard of. This is now the international standard of treatment for HIV-positive women.

The ARI unites HIV/AIDS programs at UCSF



As the years passed, AIDS care and research became more accepted by society and the University establishment. With encouragement from UCSF clinicians and scientists committed to fighting AIDS, then School of Medicine Dean Haile Debas in 1996 united the diverse HIV/AIDS programs and laboratories at UCSF under the umbrella of the new AIDS Research Institute.

As the frontlines in the battle against AIDS marched across the globe, ARI scientists dispersed to scores of countries in Africa, Asia and South America. UCSF Global Health Sciences [5] was established in 2004 to tackle questions of improving health in the world's most vulnerable populations, making the ARI and GHS natural partners.

We have begun speaking of a cure

In 2000 ARI scientists Tom Coates and Michelle Roland developed a pioneering post-exposure prophylaxis (PEP) drug and counseling program. By the end of the decade, Robert Grant at the Gladstone Institutes [6], an affiliate program of the ARI, was the first to document the effectiveness of pre-exposure prophylaxis, or PrEP, showing that the use of anti-HIV drugs could dramatically lower the risk of infection when taken by at-risk, HIV-negative individuals.



Also in 2010, HIV/AIDS Division Chief Diane Havlir, working in tandem with the City Department of Public Health, led a citywide campaign to change treatment guidelines, recommending that treatment be offered to all who test HIV-positive. This new standard has since been adopted by many jurisdictions around the world, earning the World Health Organization's endorsement in 2015. This change in guidelines benefits both the HIV-positive person?many studies have shown that earlier treatment results in dramatically improved long-term health?and the population at large, since those who have achieved viral suppression via treatment have been shown to be virtually uninfected to others.

Together, PrEP for those at risk for HIV and early treatment for those who test positive have the potential to dramatically drive down HIV-infection rates. ARI scientists are involved in a citywide coalition of health-care providers, government and public health officials and community advocates called *Getting to Zero* [7], aimed toward ending new HIV infections in San Francisco. Getting to Zero also aims to improve care and treatment adherence among those living with HIV and to eliminate HIV stigma.



ARI scientists are at the forefront of research for a cure. Steve Deeks was appointed co-chair of an international committee to explore scientific strategies toward eradication of latent HIV, effectively a cure, in 2011. That same year, two of three large, multiyear Martin Delany Collaboratory grants awarded by the National Institutes of Health to advance progress toward a cure for HIV went to groups where ARI scientists are represented. In 2015, we were awarded a five-year, \$20 million grant from amfAR to establish and direct the Institute for HIV Cure Research. This new institute will support the work of scientists at UCSF, Gladstone, Blood Systems Research Institute and other partners in the effort to cure AIDS.

We were here at the beginning of the epidemic, and we will see it through to the end. As Paul Volberding, now director of the ARI, said recently, "When a cure for AIDS comes?and it will?it is almost certain that UCSF will have played a large role in its discovery." This is why we continue the fight.

Contact Us
UCSF Main Site

© 2015 The Regents of the University of California

Source URL: <https://ari.ucsf.edu/about-us/history-aids-ucsf>

Links

- [1] <https://ari.ucsf.edu/clinical-care/ward-86>
- [2] <http://caps.ucsf.edu/>
- [3] <http://whp.ucsf.edu/>
- [4] <http://pharm.ucsf.edu/wihs>
- [5] <http://globalhealthsciences.ucsf.edu/>
- [6] <http://gladstone.org/>
- [7] <https://ari.ucsf.edu/clinical-care/getting-zero>