

UCSF Still Leading the Way

By Sue Rochman

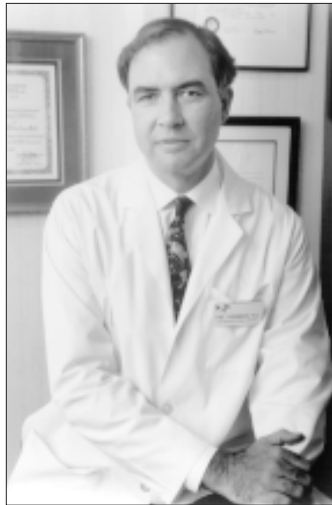
Rare is the clinician who watches an epidemic brought on by an unknown virus unfold before his or her eyes. Rarer still are those who will place their professional responsibilities before their personal fears. These women and men don't just watch history unfold, they create it.

Perhaps no one in San Francisco knows this better than oncologists **Paul Volberding, MD**, and **Donald Abrams, MD**, who, in 1983, along with the late **Constance Wofsy, MD**, an infectious disease specialist, founded "Ward 86"—the UCSF AIDS clinical services unit at San Francisco General Hospital Medical Center (SFGHMC).

One of the first HIV/AIDS facilities in the nation, Ward 86 quickly became synonymous with and shorthand for the best AIDS treatment care available. It didn't take long before the three physicians, two nurses, and a clerk were treating patients not only from throughout California but throughout the world.

Over the years, the clinic's size and range of services has expanded. These changes were underscored in October 1998 when, in conjunction with a \$200,000 makeover, UCSF AIDS clinical services was reborn as the Positive Health Program. The name change and renovations were more than merely structural or semantic events. From the outset, even though it was primarily thought of as the AIDS ward, Ward 86 was also where oncology patients were treated; more recently, hematology was added on as well. In addition, the new name reflects the ways in which advances in medical care—many of which came out of UCSF researchers' labs—have transformed HIV treatment possibilities.

At a time when optimism has replaced fear, when the words "drug cocktail," "HAART," and "living with HIV disease" roll off the tongue, few stop to think about—or want to remember—what the first years of the epidemic were like. But some will never forget.



"When we started the program, we had nothing medically to offer our patients, because we didn't understand this disease. It was very frightening."

—Paul Volberding, MD
Director, Positive Health Program at the UCSF AIDS Research Institute

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University of California
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AIDS Research Institute



Thomas J. Coates, PhD
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Maybe We're Halfway There

This issue of the *ARI Newsletter* presents the two contrasting worlds we experienced traveling from Durban to San Francisco. In our cover story, **Paul Volberding, MD**, reflects on how there was nothing to offer patients when the Positive Health Program was initiated. That world has changed. Our patients are living longer and better—but not perfect—lives because of science and its direct application to people who need that science the most.

Durban, South Africa, the site of the XIV International Conference on AIDS, brought us face to face with the other side. Too many people have HIV, and young people are acquiring HIV at unprecedented rates. Yet the life extending (not life saving) drugs that we have here are beyond the reach of most.

We can be proud of the work that goes on at the Positive Health Program at San Francisco General Hospital. It is the premier AIDS clinic in the country, perhaps in the world. Leading scientists practice there, and any patient in San Francisco can have access to these world class leaders. Every patient in San Francisco can be seen by clinicians who have been, and remain, on the front lines.

The AIDS Research Institute is making a commitment to the same kind of service in the developing world. This issue of the newsletter documents our extensive efforts in sub-Saharan Africa. Our goal is a simple one: to conduct science that will be of immediate benefit to those who are living in places not as advantaged as ours.

Our work is focused on developing new and better prevention strategies so that HIV transmission can be prevented. It is also focused on developing simpler and cheaper methods for treating HIV and its attendant illnesses so that we can share what we have with the rest of the world.

We are also making a major effort in vaccine development. Our role in this is clear—we want to get as many ideas out into the arena as possible, and to bring them to clinical trials as quickly as possible, so that HIV can be stopped.

Thanks to Macy's Passport 2000

Macy's Passport was another successful event, both in San Francisco and in Los Angeles last month. Macy's West Chairman and CEO **Jerry Sullivan** announced a multimillion dollar commitment to UCSF AIDS Research Institute and UCLA AIDS Institute for the new collaborative Vaccine Initiative to accelerate vaccine research. UCSF's AIDS Research Institute is grateful for the sustained support of Macy's West and Passport.

Mission Statement

The University of California San Francisco created the AIDS Research Institute in recognition of its obligations to the people of the city of San Francisco, the United States, and the world to prevent, understand, and treat HIV infection. The AIDS Research Institute fosters outstanding, innovative, and integrated programmatic research in HIV/AIDS and excellent training for new scientists to continue working on the HIV epidemic.

The AIDS Research Institute works in close collaboration with affected communities. Scientific results are disseminated as quickly as possible to maximize their usefulness to these communities and to fellow scientists, policy-makers, community-based organizations, and the public.

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Reflections on Durban

By Jeff Sheehy

On my flight home from the International AIDS Conference held in Durban, South Africa, the words and the spirit of Nelson Mandela's closing address reverberated in my consciousness. The organizers of the conference had pulled off a major coup holding the conference in one of the hardest hit areas in Africa. For a week, the world had no choice but to confront the immensity of the HIV/AIDS epidemic in the developing world. Slivers of hope emerged from a commitment here, a promise there, and bits of new science. The clear message of the conference was that with sufficient resources, meaning four to ten billion dollars, the transmission of HIV in the developing world could be cut in half.

In delivering his address, former South African President Nelson Mandela inspired and energized the delegates. He declared AIDS "one of the greatest threats humankind has ever faced." Mandela directly denounced discrimination against people with HIV/AIDS, moving the audience to tears when he said, "People with this disease do not want stigma and discrimination, they want love." He told a story that can only be understood in the context of the recently released statistic saying that perhaps half of South Africa's teenagers will die of AIDS. Mandela spoke of meeting with two teenagers, one with AIDS and one a 15-year-old boy who has a form of terminal cancer that causes his bones to become progressively more brittle. For this boy, any sort of rough or careless handling causes excruciating pain. He asked Mandela, "What can you say to me?" Mandela was troubled by the question, but after some time responded, "You are alive, you have a mind, your parents love you." Mandela then quoted Shakespeare to him, "Cowards die many times before their deaths. The valiant never taste of death but once."

From this impassioned charge to the youth of South Africa to live lives of courage when faced with death, I returned to San Francisco, and am appalled at the utter lack of such courage. Arriving here, I realized that I had left a place where everyone is fighting for life and came home to a place where indifference and apathy abound. Instead of seeing activists angrily focused on pushing our government and our institutions to respond to the tragedy unfolding in the developing world, I returned to so-called activists torturing scientists at the Department of Public Health over the premature release of new numbers suggesting that HIV incidence is rising. These new numbers verify what everyone knows intuitively to be true. Instead, they have been attacked as being homophobic or alarmist. Is there really any doubt that the number of new infec-

tions is not going down? The prevalence of HIV among gay men in San Francisco stands somewhere between 25 and 30 percent of the population and has been at least that since I got here in 1988. That is a sub-Saharan rate, and the fact that the number may be going up instead of down should be extremely alarming.

Besides attacking the numbers, what is the visible response? Absurd games are played as people's sex lives are publicly exposed. Snickering at hypocrisy is not responsibly addressing either of the two key issues at hand.

First, what is our responsibility to ourselves and to our community to slow or stop the rate of new infections? Years of success in slowing the spread of HIV in the gay community have ended. What has worked before may not work again. New answers are needed, and we cannot count on others to supply them. Answers must come from within the community.

Second, when are we going to acknowledge that our responsibility for those impacted by HIV does not stop with gay men? Gay men are not at the center of the fight against AIDS. The overwhelming majority of the people in the world with HIV are heterosexual and poor.

We know what can work in developing countries to slow the spread of HIV. Mandela listed them in his speech: education campaigns, condom distribution programs, drug interventions for mother to child transmission, to name a few. Why aren't we demanding that Congress appropriate real money to fight HIV/AIDS in the developing world? Jeffrey Sachs, a Harvard economist, addressed the conference chastening rich countries for their stinginess with the following statistic: "Since 1996, the capital gains from the run-up in stock prices on American stock exchanges have totaled six trillion dollars." And we cannot find the four to ten billion dollars to cut new infections in half?

Those of us with HIV today in San Francisco are, for the most part, very fortunate. Many of us have fully suppressed virus and can reasonably expect to live a fairly normal life. We have treatments and we have access to them, unlike the overwhelming majority of people with HIV in the world. How is it that our good luck frees us from any obligation to anyone else, be it negatives in our community or people in the developing world? We need new courage and renewed activism. Others acted to save our lives; now it is our turn.

Jeff Sheehy is the ARI's Deputy Director for Communications. This was published in the Bay Area Reporter on July 27, 2000.

Positive Health

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“That was one of the most surreal periods of my life,” says **Cliff Morrison, ACRN, FAAN**, who coordinated the inpatient AIDS Ward at SFGHMC, the first ward of its type. “Nothing seemed real. There was just such mass hysteria. So many people were afraid to touch these patients.”

In Ward 86, the care was the best that it could be, even if the setting wasn't. “Paul, Connie, and I and our assistants were housed in half of one of the hallways where the clinic is now,” recalls **Abrams**, who now directs the Community Consortium, an association of more than 250 HIV health care providers in the Bay Area. “At that time, that was the only half of the hallway that had been remodeled.”

As the number of patients grew, the clinic did too. First the other half of the hallway was renovated to become part of the clinic. Then, the clinic encompassed the entire sixth floor. And the patients kept coming. “What stands out most in my mind,” recalls **Sharon Martinez**, who began working on Ward 86 in 1988 and now serves as PHP's Education Coordinator, “was just the sheer number of really sick people we were seeing. The waiting room would be overflowing with people—they'd be standing or sitting in the hallways. And then the elevator doors would open up, and more people would flow in.”

Today, 190 people work in the PHP, providing for close to 2,500 outpatient visits per month. In addition to the direct care the program provides—care that continually has been ranked best in the country by *U.S. News and World Report*—PHP also encompasses internationally renowned research and professional education programs.

PHP's education program provides clinical educational opportunities for UCSF students and residents, trainings for physicians and other health care providers, and patient education. It also offers an intensive two-week educational program for HIV/AIDS physicians from other countries. “For many of those physicians who come here, it's like a time warp,” says **Martinez**. “It's like

they are where we were 10 years ago. So, for them it's like coming to the future and looking at what HIV services could be.”

In turn, for the PHP staff, listening to these physicians is like a wrinkle in time. “When we started the program,” recalls **Volberding**, “we had nothing medically to offer our patients, because we didn't understand this disease. It was very frightening. And that fear was not insignificant either, because although we knew we were dealing with an infectious disease, we didn't know how it was transmitted. We were probably some of the first people in the world to be antibody tested, once that became available. And we were tested with great fear, because we didn't know what we would find.”

Gradually the fear, the frustration, and the deaths took their toll. “We were watching patient after patient die these horrible deaths,” says **Volberding**. “And our staff was continually under stress. There was no magic answer.”

But there was a need to talk and to question. Counselors from the Center for

Attitudinal Healing in Marin County were brought in. And the weekly sessions they held were more akin to support groups than staff meetings. “We'd talk about the emotional impact a patient was having on the clinic and on the provider and staff,” says PHP Medical Director **John Stansell, MD**, who joined the program in 1987. “What happens to the patient also happens to the clinic. If someone is not doing well, the clinic knows that and reacts accordingly. The clinic is sort of a living, breathing entity with an emotional content of its own... It's very taxing on a group of dedicated providers to see patients wither and die. Also, we lost many of our staff to this disease over the years. It's been a very long road to where we are today.”

That road included establishing certain rituals to mark a patient's death. Today, the deaths are much less frequent, but the rituals remain. “When a patient dies, we still write their name on the blackboard where physicians write notes about patients and interact,” says **Abrams**. “By keeping that person's name up there for a month, it gives everyone who cared for him or her the chance to talk about that person and to learn better to cope with the loss.”



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Paul Penney (R) of Robertson Stephens presents Dr. Paul Volberding with a check for \$30,000, proceeds from Until There's A Cure's "Swing for a Cure" golf tournament, co-sponsored by Robertson Stephens and Price Waterhouse Coopers.

The first names Abrams and others wrote on that blackboard were more often than not the names of white, middle-class gay men. But as the epidemiology of the epidemic has changed in San Francisco and throughout the U.S., so have the names on the blackboard at PHP.

“We have a very diverse group of patients,” says Volberding. “Many of our patients are poor, with public insurance as opposed to private insurance, for the most part. That is more a reflection of where the epidemic is going demographically. Our commitment is taking care of patients regardless of their ability to pay. In addition, we care for people from all over the world who come for second opinions because they recognize that our reputation is really unmatched.”

In terms of risk factors for HIV, says Stansell, about 55 percent of the clinic’s patients are gay men, about 35 percent are injection drug users, and about 10 percent are heterosexual. Of the injection drug users, about 5-10 percent are also gay men. “The total number of men who have sexual risk factors is still about 60 percent,” says Stansell. One significant change, however, is in the number of women the clinic sees. “Five to ten years ago, one percent of our patients were women,” says Stansell. “Today, they make up about 17 percent of the patients we see.”

Talking about those statistics is important, says Stansell, because many people think patients at the PHP differ dramatically from those seen elsewhere. “Our patient population is very similar to the patient population you’d find in any public or private clinic in this city,” says Stansell. “There’s this idea that individuals have to be on their last legs to seek care here, and that’s absolutely untrue. We have a spectrum of services that addresses the needs of HIV-infected individuals from the moment they seroconvert until they have end-stage immunocompromised systems. Just to deal with the HIV, you have to be a complete care provider for these patients, and that’s what we are.”

As the epidemic changed, it also became clear to the PHP staff that they needed to reach out to those who were less likely to come in for care. Stansell notes that “over the years, we’ve morphed and

we’ve become much less of a clinic-centered operation, and much of our operation is now in the community.” **Jeannette Kimili**, Manager of the Positive Health Program, emphasizes this transition. “On the clinical side, we’re creating partnerships in the community by working with programs like the Tenderloin AIDS Resource Center and Lyon-Martin Women’s Health Center.” Both Stansell and Kimili noted that PHP is taking their services out to where there are great numbers of people who are HIV positive.

The fluidity to continually respond to the changes and challenges the epidemic presents is critical. “One of the things that’s been most gratifying about the program here is that, as the epidemic has changed, our providers, our interests, our clinical services, and our research has really changed right along with that,” says Volberding. “That means we are seeing many people with challenges in addition to HIV, whether poverty, homelessness, injection drug use, or other substance use or psychiatric difficulties. And it means that at times the challenge in managing HIV is knowing if HIV is even the most important thing to be managing first.”

Now, it also means looking beyond the borders of the U.S. and focusing on the devastation AIDS has wrought in the developing world. “I think we should feel an increasing responsibility to respond with the appropriate sense of moral outrage to what’s going on with the epidemic in Africa, Asia, and South America,” says Volberding. “Our challenge now is to remain committed to this epidemic and to open our eyes a little wider to what’s happening in the rest of the world, but not to ever forget the people in San Francisco who need our help.”

Those who were on the sixth floor of Building 80 when the HIV epidemic first took hold carry an accumulation of loss that relatively few health care providers will ever know. But it is the response to that loss that has made PHP what it is today. “Our mission statement says to treat all people with dignity, respect, and compassion,” says Martinez, “and I see that here. People know that this is where you come to get the best care. This is where it started. This is where the knowledge is. This is where the compassion is. This is where it’s real.”



Patti Dwyer, former Executive Director of Until There's A Cure (UTAC), sees the impact of their grantmaking when she walks through the halls of PHP at San Francisco General Hospital. “The staff has done an incredible amount for so many people,” she says. “Paul Volberding is leading a great team.” Founded in 1993, UTAC began raising money through sales of the AIDS bracelet. To date, they have granted more than \$4.5 million to AIDS organizations around the country, including \$260,000 for UCSF’s Positive Health Program.

ARI's New Leadership Council

Formed this summer to champion the UCSF AIDS Research Institute's new Breakthrough Fund, the Leadership Council already has a full calendar of advocacy activities designed to showcase ARI's internationally recognized track record for finding scientific breakthroughs that advance the war against HIV/AIDS.

"We are so grateful for this extraordinary group of community leaders who have come together on behalf of our mission," states ARI Director **Thomas J. Coates, PhD**, one of the visionary founders of ARI. "We've been eager for a group like this to help us bridge a critical funding gap," said Coates.

The Breakthrough Fund

AIDS science must move quickly, he explains, to keep ahead of the evasive virus and address the complexity of eliminating HIV disease. UCSF is uniquely able to promote this kind of responsive innovation. "We are comprehensive and multidisciplinary, and our scientists are encouraged to cross traditional boundaries, collaborate with colleagues, and pursue novel ideas," he says.

As a direct result of its reputation for excellence, UCSF scientists are clearly adept at competing at the National Institute of Health (NIH) and with other agencies for extramural research funding for very focused avenues of pre-qualified research. But government funding promotes conventional science, and conventional science takes too long and is too cumbersome at times.

This leaves a strategic funding gap in ARI's ability to pursue promising ideas at their nascent stage; ideas which, when developed, could warrant substantial funding commitments at the Federal level. These projects can lead to the kinds of breakthroughs that make a tremendous difference in the battle against HIV/AIDS. "The Breakthrough Fund," Coates says, "will help close that gap and significantly strengthen our capacity to find the cure."

The Leadership Council Commitment

"There is a very high sense of commitment among our members to ARI and the Breakthrough Fund," confirms **Virginia Peacock**, the founding Chairperson of the Leadership Council. "Look at how

much has been accomplished already. A five-year commitment from Council member **Raquel Newman** officially launched the Fund. Now, guided by our member and UCSF physician **James O. Kahn, MD**, we are inviting others to get involved with the Breakthrough Fund. **John Greenspan, BDS, PhD**, is leading a similar effort among ARI's faculty and staff. High tech executive **Harvey Anderson** is leading the Council's team of **Ken Hedrick** of Jackson Securities and **Bill Criss** of Chase Manhattan Bank targeting new start-ups with an equity giving initiative, which will support the Fund.

On October 29, the Leadership Council will have the first of three invitational evenings showcasing one of ARI's activities, with a reception focusing on Pediatric AIDS and ARI's **Dr. Diane Wara**. This event will celebrate the Champions Run for Children, sponsored by new Council member **Polly St. Geme** to benefit the Pediatric AIDS program of ARI. The reception will be hosted by member **Hedy Holmes**, working with her colleagues on the Council's events committee, **Rick Turley** and **David Ortega**.

On November 30, the Council will collaborate with other ARI activities planned for World AIDS Day to co-host its first Breakthrough Fund Dinner, where donors and friends can hear directly from ARI faculty about the kind of scientific breakthroughs the Fund is making possible.

ARI Priorities

Altogether, there are nine fundraising priorities for ARI. A primary area is the search for vaccines, which has its own advocate on the Leadership Council in **Michael Steinberg**,

recently retired Chairman and CEO of Macy's West. Some additional areas include the Positive Health Program, HIV InSite, and programs at San Francisco General Hospital in particular, ARI's new International Programs led by **Nancy Padian, PhD**, the Pediatric AIDS effort led by Dr. Wara, and efforts to endow the leadership chairs of ARI.

The Leadership Council committees have already begun their work in earnest. "We have a much brighter future thanks to members of our Leadership Council," says an enthusiastic Dr. Coates.

ARI Leadership Council Members

Virginia Peacock, Chair

Harvey Anderson

Alvin H. Baum, Jr.

Anthony Chase

John S. Greenspan, BDS, PhD

Ken Hedrick

Hedy Holmes

James O. Kahn, MD

Karl Keesling

Tim McQuaid

David Nathanson

Raquel Newman

David Ortega

Polly St. Geme

Michael Steinberg

Rick Turley

Deborah Widener

Profiles in Leadership:

An Interview with Raquel H. Newman, EdD, ARI Leadership Council Member and Chair, Advocacy and Communications Committee

A major activity of ARI's new Leadership Council is the Breakthrough Fund, providing discretionary money to invest in promising new scientific ideas in the fast-moving battle against HIV/AIDS. The first donor to that fund is one of the Council's founding members, **Raquel Newman.**

ARI: Raquel, why this contribution to the Breakthrough Fund?

RN: The devastation wrought by this disease is worldwide, and we must find a vaccine—and soon. The worldwide excellence of UCSF's AIDS scientists at ARI is well known, particularly for their knack at finding important breakthroughs. We mustn't let one of their promising ideas go without a chance. The Breakthrough Fund can help with that.

ARI: You're very active in the community. You serve on the board of the Fine Arts Museum's prestigious Achenbach Graphic Arts Council, and as Chair of the Board of the Pacific Graduate School of Psychology and the Northwest Pacific region of UAHC's (Union of American Hebrew Congregations) Camps for Living Judaism. Why are you involved in ARI?

RN: Because ARI's mission—to find a cure—is dear to me. And because ARI's values, as exemplified by its director, Tom Coates, and the faculty, are grounded in my own personal beliefs and core values. There's a great integrity to the place.

ARI: You're a published author. Your book, Giving Away Your Money, is now out, and you have many articles. What advice do you have to people with regard to fundraising?

RN: Find a cause that's dear to you—that means something to you personally—and get behind it. These missions can't be implemented without our help. Often, I remind people, it's not necessarily about the individual amounts one or another person might give, but that all of us participate in the best way each of us can. We can make a difference that way, banding together as one. That's what ARI's Leadership Council is doing.

Champions Run for Children



The second annual Champions Run for Children has been scheduled for Sunday, October 29. The elite invitational race will be kicked off by the Jamba Juice 5K starting at 9:00 a.m. in Kezar Stadium in Golden Gate Park. This year, proceeds from the race benefit the UCSF ARI's pediatric AIDS programs, which provide clinical care for children and adolescents infected by HIV throughout Northern California.

Dozens of Olympic champions from more than ten countries will participate in an elite invitational one-mile race. Last year's event was the largest assembly of sub-four-minute mile runners in Bay Area history. This year, Steve Scott, who holds the American record for the mile at 3:47, last year's Champions Run winner, Russian Olympian Lyudmilla Vasilyeva, and a large field of Olympians fresh from Sydney—including Team USA's 1500 meter finalist Marla Runyon—are expected to provide adrenaline-pumping excitement as they race around the quarter-mile oval in Golden Gate Park. The runners will be competing for the largest one-mile prize purse in the nation—\$30,000!

Children under 18 are invited to run with the Olympic athletes in a series of one-mile races on the same Kezar Stadium track. Throughout the day, youth runners will be treated to races and festivities designed especially for them. The race festival is designed as a family event, and will offer food, live music, clowns, and face painters!

“It is great that an event is focusing on the care of children infected with HIV,” said **Diane Wara, MD**, the medical director of UCSF's pediatric AIDS programs. “Society doesn't talk about the problem enough, and I am excited to be a part of a running race that is carrying the message. Tying it to a festival that is designed to get children running is a big plus, and I'm looking forward to participating with our staff, patients, and their families.”

Registration is \$25 per person, and \$15 for children under 18. To register, please call the Champions Run for Children Hotline at (415) 759-2690 or visit www.rhodyco.com.

HIV/AIDS in Sub-Saharan Africa

By Lisa Garbus, MPP

Sub-Saharan Africa is the region most affected by the HIV/AIDS pandemic. At the end of the twentieth century, 24.5 million African adults and children were living with HIV/AIDS. The adult (15-49) HIV prevalence rate was 8.57 percent, and 55 percent of HIV positive adults were women. The region accounts for 71 percent of the global total of people living with HIV/AIDS, 79 percent of cumulative AIDS deaths, and 92 percent of cumulative AIDS orphans. Of the 15.7 million women worldwide living with HIV/AIDS, 12.9 million—82 percent—live in sub-Saharan Africa.

During 1999, 4 million people in the region became infected with HIV, representing 74 percent of all new global HIV infections. Of all AIDS deaths in 1999, 79 percent occurred in the region. Nearly 90 percent of infants who acquired the virus perinatally or through breastfeeding in 1999 were African (*UNAIDS, Report of the Global HIV/AIDS Epidemic, June 2000*). This burden is staggering, particularly given that sub-Saharan Africa accounts for only about 10 percent of the world's population.

Impact of the Epidemic

AIDS is the leading cause of death in Africa and the prime factor depleting adult productive capacity. Households are losing income earners, with myriad impacts on consumption and savings. The enormous number of AIDS orphans is placing additional burdens on extended families and communities. Many orphans are growing up with no family structure, thereby rendering them more vulnerable to HIV infection.

The impact of AIDS on life expectancy in Africa has been immense, and infant and child mortality in heavily impacted countries has risen dramatically. The U.S. Census Bureau notes the emergence of a "population chimney," with fewer births and massively high death rates among young adults.

AIDS is claiming the lives of highly skilled

workers. Absenteeism (due to illness and/or funeral attendance), decreased productivity, worker turnover, training costs, funeral and death benefits—all these are increasing across sectors, draining scarce public resources, and impeding job creation and foreign investment. Many countries are also contending with dual TB and HIV epidemics.

Most Africans live in rural areas, where households affected by HIV/AIDS are experiencing enormous decreases in agricultural output. Many people with AIDS return to their village when they become ill, placing additional burdens on households.

The impact of AIDS on life expectancy in Africa has been immense, and infant and child mortality in heavily impacted countries has risen dramatically.

What Is Fueling the Epidemic?

Over 90 percent of HIV infections in sub-Saharan Africa are transmitted heterosexually. Factors facilitating transmission, which vary by country, include:

- the subordinate status of women
- high prevalence of other sexually transmitted infections
- high population mobility
- high rates of sexual mixing
- sexual violence
- poverty
- weak health infrastructures
- young, rapidly growing population
- stigma, fatalism around AIDS
- ignorance of one's HIV status
- lack of treatment to suppress viral load in those infected, thus rendering them more infectious
- limited access to information and services for sexual and reproductive health, especially among youth
- insufficient public/private responses

Macroeconomic forecasts of the impact of AIDS have often been contentious; however, many African countries have projected that AIDS will reduce GDP, per capita income, and savings rates significantly. Because of the epidemic's socio-economic and political impact, in January 2000, the UN Security Council advised governments to view AIDS as a threat to peace and security. Two months later, the Clinton Administration declared AIDS a national security threat.

The epidemic in Africa, however, is not monolithic. For example, Senegal has maintained low and stable HIV infection rates, due partly to an early response and partly to the less-virulent HIV-2 that predominates. And through an early, strong response, Uganda has reduced national HIV prevalence, although it is still contending with a major epidemic.

Gender Disparities

In sub-Saharan Africa, the disparity between HIV prevalence rates for men and women is enormous. In Swaziland, for example, 25.88 to 31.19 percent of women ages 15 to 24 are infected with HIV, compared to 8.69 to 17.37 of men in the same age group (*UNAIDS 2000*).

Women tend to become infected at younger ages than men for both biological and socio-cultural reasons. Age mixing is a crucial factor: many young girls have sex with older men, who have been sexually active for many years and thus are more likely to be infected. Other factors exacerbating women's risk include their subordinate sexual and economic status;

greater efficiency of male-to-female transmission; sexual violence or threats of violence; laws that deem women minors or deny them land tenure rights; sex work and situations, such as food insecurity, in which women trade sex for food or other basic needs; and customs such as dry sex, polygamy and wife inheritance. The need for female-controlled preventive methods is also a critical issue.

Because of the epidemic's socioeconomic and political impact, the UN Security Council advised governments to view AIDS as a threat to peace and security. Two months later, the Clinton Administration declared AIDS a national security threat.

Looking Ahead

The XIII International AIDS Conference in Durban, convened for the first time in a developing country, highlighted the magnitude of AIDS in Africa. Treatment access was the dominant theme, discussed within frameworks encompassing human rights, drug pricing instruments, international trade regimes, and debt relief. Prevention of mother-to-child transmission (MTCT) also received much attention, with calls for it to become a frontline intervention in sub-Saharan Africa; however, transmission of HIV through breastfeeding remains a confounding factor, and the best feeding method for infants whose mothers are HIV positive is undetermined. There was also debate about the ethics of preventing MTCT without treating the mother.

The conference also underscored wide-ranging agreement on a core set of essential prevention activities. Although many donors announced new funding in Durban, it still falls far short of the US \$3 billion UNAIDS says is needed each year to fund HIV prevention and treatment of opportunistic infections in sub-Saharan Africa. (This figure does not include the cost of antiretroviral therapies.)

National policies must focus not only on immediate prevention and care, but more long-range efforts to render African societies less vulnerable to HIV (e.g., gender equality, sexual and reproductive health, human rights, good governance, poverty reduction, and human and economic development). Addressing HIV/AIDS also invariably leads to examination of a country's entire health care delivery infrastructure, both a challenge and an opportunity. The frontline courage of Africans with HIV/AIDS, which was highlighted throughout the Durban conference, will doubtlessly also play a key role in policy formulation.

Africa's partners must be cognizant of the need to work simultaneously at these different levels to prevent HIV and care for those infected. Countries themselves, however, will drive the complex process to find and implement effective responses to HIV/AIDS.

Lisa Garbus, MPP, is the Policy and International Editor of HIV InSite (<http://hivinsite.ucsf.edu>). For a more detailed version of this article, with extensive web links and references, see <http://hivinsite.ucsf.edu/international/africa/>.



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Thanks to Assemblymembers Migden and Shelley

California State Assemblyman and Majority Leader **Kevin Shelley** (above, L) recently presented a check for \$1.25 million to UCSF's AIDS Research Institute and the Positive Health Program (PHP). PHP is headed by **Dr. Paul Volberding** (R). Shelley and Assemblywoman **Carole Migden** were instrumental in securing these state funds, awarded in the last legislative session. The funds will be distributed to several ARI programs, including the clinical care and research programs at PHP.

Assemblywoman Carole Migden was recognized and thanked on October 19th for her work in establishing the Migden HIV Transplant Initiative. This \$2 million appropriation from the State Legislature to UCSF's ARI enabled us to initiate a research program to determine the safety and efficacy of kidney and liver transplants for HIV positive persons. UCSF, as a result of this funding, is starting a ten-center clinical trial around the country to address this important issue.

The View From Harare

A letter by Katherine Fritz, PhD, MPH, to her Center for AIDS Prevention Studies (CAPS) colleagues

Dear Colleagues:

I write with very good news—we finished our study recruitment on Monday of this week. We ended with a total of 324 wonderful participants. The intrepid beerhall study team ended its final beerhall visit in appropriate style—one of our vans failed to start, so we pushed it to a rolling start and sputtered away. Keeping this project rolling has been both fulfilling and challenging, so you can imagine our delight at successfully reaching our goal even despite fuel shortages, labor strikes, and elections.

In the coming two weeks, we will finish post-test counseling and wrap up our finances. To date, 47% of the study participants have come to receive their results—a figure we consider high given that many men who participated in the study had never before considered having a test. Our acceptance rate was 64%—lower than we wanted since we were shooting for 70%, but still not too bad over the short period of time we were in the field. HIV test results are not yet in on all participants, but at the moment, the HIV prevalence stands at around 28%. We are still waiting for detuned test results, and I'll let you know what we find as soon as they come in. All of the questionnaire data is entered, and we're now cleaning it in preparation for analysis. We hope to get the basic results out and published quickly as we move toward our goal of testing a beerhall-based intervention project.

Data aside for the moment, we have learned many lessons from this experience. Perhaps the most important is the feasibility of taking HIV testing, counseling, and education into the townships where designers of Zimbabwe's HIV prevention program have been fearful to tread. For example, USAID, in collaboration with a social marketing organization called Population Services International (PSI), has designed Zimbabwe's VCT (Voluntary Counseling and Testing) program. They chose to place Harare's VCT center on the border of a posh neighborhood, and in order to make it "sustainable," one can only access the service for a fee (equivalent of US

\$2). This fee is affordable to the middle- and upper-class men and women PSI features in their TV ads, but to an average working-class person living in one of the townships, it's yet another reason not to seek testing and counseling.

Usage of the VCT center has been low despite the millions spent on a media campaign. PSI tells me that if someone comes for testing but cannot afford to pay, they will be given the service free of charge. I asked if they advertised this important fact. I already knew the answer, but at least the person I spoke with seemed slightly chagrined when he had to say no. There was much talk at Durban about making HIV drugs available to African countries. I can't imagine how that will happen given that USAID won't contribute a mere \$2 to help someone get tested. In addition, funds are not

being allocated to build the capacity of community-based organizations that support HIV positive people. Without such support systems in place, there is even less incentive for people to opt for testing.

Clearly, there's a lot of room for improvement in Zimbabwe, on the part of both donor agencies and the Zimbabwean government, where leadership on HIV has been extremely weak. Our study team wrote a paper detailing our positive experience taking HIV testing and counseling into the community.

We're hoping to lobby in favor of making mobile VCT and community outreach a standard part of VCT services in Harare. We have also gotten involved with a township-based support organization run by HIV positive individuals.

There is so much interesting work to do here, my partner Ann and I are very excited that we have the opportunity to stay for the coming year. We'll be helping with the various UCSF projects currently running in Harare as we write a funding proposal for a male-focused beerhall intervention study. By the end of the year, I will be able to present the results of the current project and provide a preview of the intervention project.

Katherine Fritz, PhD, MPH, is a Postdoctoral Research Fellow with the UCSF AIDS Research Institute's Center for AIDS Prevention Studies in Harare, Zimbabwe. She can be reached at katherine@zappuz.co.zw.



Members of the University of Zimbabwe/UCSF research team (L–R) Chiratidzo Muyaka, Gertrude Khumalo Sakutukwa, Elsie Hlahla, and Lizzie Magada.

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The Vaccine Imperative

Pat Christen, Executive Director of the San Francisco AIDS Foundation, spoke eloquently about the global HIV pandemic at the Foundation's Leadership Dinner last Spring. We are reprinting some of her remarks here, as they echo the international imperative that so many of us felt following the International AIDS Conference in Durban.



Remember the early 80s in San Francisco. Eight thousand HIV infections per year were occurring. The death rate was climbing. We were scared and isolated. When we turned to our government, our churches, our temples for help, what were we told?

- This disease might be a problem in San Francisco, but there are far bigger problems to contend with elsewhere in the country.
- Gay people and injection drug users are disposable anyway.
- This was God's punishment.

Yet, we made the case that this was a problem for the nation. If we have any integrity, we must now make the same case for the world. We must be willing to play a forceful role in ending the global pandemic as well as our local epidemic. This will not be easy to do.

In most parts of the developing world, spending on health care—all health care—is less than \$5 per person per year. Infrastructure is poor. Clean water is not always available. Simple antibiotics are scarce. In such an environment, triple combination drug therapy for HIV is not a universal solution.

A vaccine is imperative.

It will be very difficult to develop an AIDS vaccine. The social, political, and economic obstacles are considerable. Nevertheless, as Eleanor Roosevelt said, "You must do the thing which you think you cannot do."

First, we must be vigilant about ensuring that vaccine efforts in no way undermine development of better treatments and, ideally, a cure for those living with HIV. There is a deep fear among many people living with HIV that if a successful vaccine is developed, they will

be written off, left to die. This is not irrational. Given the battles that have been fought with our government and the pharmaceutical industry, it is entirely understandable that people with HIV would feel even more vulnerable with the advent of a successful vaccine. Simply put, if the pharmaceutical industry believes the market for their HIV drugs is shrinking, they will not have incentives to continue producing new and better drugs.

Second, we must remember that any vaccine is only one part of an overall prevention strategy. There is no guarantee that vaccines will be 100% effective. Needle exchange, condom use, and other proven AIDS prevention strategies must be supported and expanded.

Third, community education and participation in vaccine trial designs and the trials themselves are essential. There are real concerns for trial participants regarding health care, the need for counseling and safe sex education, and false positive results on antibody tests that lead to loss of insurance. Other ethical and social barriers need to be fully explored to garner widespread support for participation in vaccine trials.

Fourth, we need money to develop and test vaccines. Human trials are expensive, and they need to take place over a multi-year period in order to determine the effectiveness of a potential vaccine. This will run into the hundreds of millions, if not billions, of dollars. Which brings me to my fifth obstacle.

We are the richest nation on earth. We have the resources necessary to address this global plague. And while it is true that we in San Francisco and the U.S. cannot do everything, we can do some things very, very well—including leading the effort to create effective AIDS vaccines. But we do not, as yet, have the political will. Our challenge in the coming year will be to create the will necessary to find a vaccine for AIDS.

We in the Bay Area come from a legacy of greatness. We are part of a community that refused to allow our cherished friends to die. We must now remind ourselves that all of humanity is to be cherished.

Together, we can do this. We can *do* this. Together we must do this.

The mission of the San Francisco AIDS Foundation is "to end the HIV pandemic and the human suffering caused by AIDS." These remarks were taken from Pat Christen's speech at the SFAF Leadership Dinner on May 11, 2000. For the full text, please go to <http://hivinsite.ucsf.edu/ari/christen>.

Upcoming meetings

PanAfrica Conference 2000

"The Global HIV/AIDS Pandemic: A Crisis of Economic Resources"
November 2-4, 2000
Nashville, Tennessee
Sponsored by Healthcare Management Int'l Co.
PANAF2000@aol.com
www.panaf2000.com

13th Annual Conference Association of Nurses in AIDS Care

"Chasing a Changing Tide: Complex Clients, Care & Communities"
November 2-5, 2000
San Juan, Puerto Rico
AIDSNURSES@aol.com
www.anacnet.org

National AIDS Treatment Advocates Forum

November 9-12, 2000
Dallas, Texas
Sponsored by National Minority AIDS Council
www.nmac.org

National STD Conference 2000

"Untapped Opportunities: Connecting Science with Solutions"
December 4-7, 2000
Milwaukee, Wisconsin
Sponsored by American Social Health Assoc.
www.ashastd.org

Bridging the Gap in San Francisco: Harm Reduction Research, Policy & Practice

January 11-12, 2001
San Francisco, California
Sponsored by SF Department of Public Health
Community Substance Abuse Services
www.dph.sf.ca.us/bridging_gap.htm

8th Annual Conference on Retroviruses and Opportunistic Infections

February 4-8, 2001
Chicago, Illinois
For registration and abstract submission:
www.retroconference.org

13th National HIV/AIDS Update Conference

"Translating Progress into Practice"
March 20-23, 2001
San Francisco, California
Sponsored by amfAR
Jennifer Attonito, Conference Director
212-806-1633
jennifer.attonito@amfAR.org
www.amfAR.org
Abstract deadline: December 15, 2000

Global Health Council 28th Annual Conference

"Healthy Women, Healthy World"
May 29 - June 1, 2001
Omni Shoreham Hotel
Washington, DC
802-649-1340
conference@globalhealth.org
www.globalhealth.org

First International AIDS Society Conference on HIV Pathogenesis and Treatment

July 8-11, 2001
Buenos Aires, Argentina
For registration and abstract submission:
www.aids2001ias.org

2001 National HIV Prevention Conference

August 12-15, 2001
Atlanta, Georgia
Sponsored by Centers for Disease Control and Prevention
www.2001HIVPrevConf.org

Community Forum and Report Back

The Conant Foundation and the UCSF AIDS Research Institute sponsor a free forum on both the September ICAAC meeting in Toronto and October's Glasgow Conference.

Monday, November 6, 2000

6:00-9:00 PM

**Cole Hall, Medical Science Building
Parnassus Campus**

*Consult the ARI website or call the
Conant Foundation at 415-643-1822
for further details.*

*Light refreshments will be served. Free, but
RSVP to 415-597-UCSF or ari@psg.ucsf.edu*

<http://ari.ucsf.edu>

UCSF AIDS Research Institute

74 New Montgomery Street, Suite 600
San Francisco, CA 94105

Save the Date!

**World AIDS Day
Annual Symposium**

December 1, 2000

Cole Hall
2:00-5:00 PM
Reception 5:00-6:00 PM

Call 415-597-UCSF
after November 10 to RSVP
Free

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