

THE UW/FHCRC CENTER FOR AIDS RESEARCH

A Comprehensive Response to a Continuing Pandemic

A Network of Expertise, a Record of Success

The UW/FHCRC Center for AIDS Research.

One of 19 such national centers, CFAR is based in the UW School of Medicine and administered by the Department of Global Health.

Consortium Institutions. The University of Washington, Fred Hutchinson Cancer Research Center, Seattle Children's and Seattle BioMed.

Director. King K. Holmes, M.D., Ph.D., renowned STD/AIDS researcher and winner of the prestigious Canada Gairdner Global Health Award.

Mission. To advance knowledge in the clinical epidemiology, pathogenesis, treatment and prevention of HIV/AIDS by fostering collaborative and interdisciplinary research, supporting career development in junior investigators, and providing research infrastructure and resources to researchers and scientists at its affiliated institutions.

Members. Nearly 600, including faculty, research scientists and pre- and post-doctoral trainees.

National and International Collaborators.

- Ten major international HIV/AIDS research and related clinical infrastructure facilities in Kenya, Uganda, Ethiopia and Peru.
- Seattle-area community leaders in the field of HIV/AIDS: nonprofit executives, public health specialists and social workers.
- Other affiliated local, regional and national institutions with HIV/AIDS programs: Public Health Seattle-King County, the Bill & Melinda Gates Foundation, Lifelong AIDS Alliance, PATH and the University of Hawaii.

IN A CITY LIKE SEATTLE, a diagnosis of HIV is shattering, but the disease is ultimately manageable — for a person with access to the expert medical care provided by a system like UW Medicine's. With treatment, he or she can expect to live many healthy, functional years. However, elsewhere in the world, and even elsewhere in the U.S., this diagnosis can still be a death sentence; less than one-third of the 35.3 million people living with HIV today have access to treatment.

Increasing the availability of the medicines that counteract the virus is critical; equally important are prevention and, ultimately, finding a cure.

A partnership between the University of Washington and Fred Hutchinson Cancer Research Center, the Center for AIDS Research (UW/FHCRC CFAR) recognizes the complexity of the HIV/AIDS pandemic — that factors such as inequity, healthcare access, poverty, ignorance and co-morbidities vary around the world. The work of CFAR investigators and staff reflects the reality of HIV/AIDS both domestically and internationally: their research is innovative, interdisciplinary, tailored to specific community needs, and necessary to ending the HIV/AIDS pandemic.

It is our hope that you will consider supporting this work and, in so doing, help to make a real difference in the lives of those affected by HIV/AIDS worldwide.

THE ONGOING CRISIS

Medical advances in the treatment of the disease have given many a false sense that the HIV/AIDS epidemic is under control, **but the number of persons who live with HIV while receiving no treatment still far exceeds available funding for medical care**, especially in Africa.

Even in our own country, some under-resourced communities have an HIV prevalence rate as high as that in developing countries, and people are not getting the care they need.



Named after one of Africa's top medical researchers, the Ndinya-Achola Building in Mombasa, Kenya, was funded in part by CFAR, and supports collaborative research and training.

Worldwide, while infection rates are falling in some populations, they are increasing in others, such as adolescent girls. Finally, because recent research has shown the importance of beginning treatment shortly after diagnosis in order to reduce transmission and co-infections, and because treatment allows people with HIV to live longer, the overall need for medication for those infected with HIV has only increased.

The HIV/AIDS mortality rate has decreased since its peak in 2006; however, without further investment in HIV/AIDS research, we will not be able to reduce the number of new infections.

There is an urgent need to support new investigators who will make up the next generation of HIV/AIDS researchers, as the decrease in federal funding for early-career biomedical researchers is dis-incentivizing talented scientists from entering the field — which represents a tragic loss for those living with or at risk for HIV.

AN AIDS-FREE FUTURE: OUR RESEARCH PRIORITIES

The UW/FHCRC CFAR envisions a world where everyone has access to HIV/AIDS prevention, diagnosis and/or treatment. *Ultimately, we envision an AIDS-free generation.*

To make this vision a reality, CFAR must continue to support established interdisciplinary investigators, while training the next generation of HIV/AIDS investigators to effectively address the disease.

Specifically, over the coming years, CFAR will focus on four strategic research priorities, which align with the White House National HIV/AIDS Strategy adopted in 2010:



CFAR supported the installation of solar panels to power computer and laboratory equipment in a small research building at the Ahero sub-district hospital in rural Western Kenya, where power outages are common.

- **Preventing new infections** through research on vaccines, microbicides, treatment and prevention;
- **Improving disease outcomes** by pursuing new drug targets, supporting research on the diagnosis and treatment of HIV and HIV-related cancers and co-infections, and incorporating health economics evaluations in this research;
- **Expanding basic discovery research** by supporting interdisciplinary, collaborative research on the pathogenesis of HIV and potential approaches for a cure; and,
- **Reducing HIV-related disparities** by promoting sexual health research, emphasizing health equity, engaging affected communities and characterizing and monitoring HIV-related health inequities.

From mentoring early-career researchers to disseminating the latest findings, from providing international laboratory support for clinical research to collaborating with investigators at partner institutions in pursuit of a cure via gene therapy, CFAR is at the forefront of innovative responses to the HIV/AIDS epidemic.



The HIV Center of Excellence at the Kasangati Health Center in Kampala, Uganda, was built by CFAR in collaboration with Makerere University.

CFAR's Accomplishments

- **ADVANCING CARE.** CFAR researchers have conducted ground-breaking research illustrating the life-saving benefit of starting ART early, the effectiveness of PrEP in decreasing HIV transmission and acquisition, and the effectiveness of bed nets and water filters in delaying HIV progression in Africa.
- **RETURN ON INVESTMENT.** Of the 42 investigators who received CFAR New Investigator Awards (NIAs) since 2000, 93 percent published, and 84 percent received subsequent AIDS research funding totaling \$33,857,758 — a nearly eightfold return on an initial investment of \$4,395,664.
- **CREATING LEADERS.** Of 15 NIA recipients who completed their awards since 2007, all now have faculty, research institute, government or foundation positions.

CFAR'S LOCAL, REGIONAL AND GLOBAL IMPACT ON HIV CARE

Research by CFAR investigators and the work of CFAR programs has directly improved the continuum of care for individuals with HIV around the world, from encouraging those at risk to be tested, to improved diagnostics, earlier treatment, better care and more effective prevention. Improved care, in turn, strengthens these prevention efforts, as individuals on anti-retroviral therapy are much less likely to infect others. These effects are being seen locally, regionally and globally:

- Because of Public Health Seattle-King County's connection to CFAR, King County has a multi-pronged approach to getting people with HIV diagnosed and into care. As a result, we have the best coverage for vulnerable populations with HIV of any county in the U.S.
- Through UW Medicine's WWAMI (Washington, Wyoming, Alaska, Montana and Idaho) program, and also with work in Oregon, CFAR is expanding Seattle's model of HIV care into the entire Northwest region.
- Through its partnership with the International Training & Education Center for Health (I-TECH), CFAR helps train leaders in HIV care around the world, improving the quality of care globally.

The Power of Investments: Creating and Leveraging

Recent private investment in CFAR has enabled:

- The creation of a fund to support basic research in HIV/AIDS.
- Support for nine exceptional early-career investigators in HIV/AIDS research. They subsequently received 19 grant awards totaling almost \$20.2 million.
- Beginning construction on an HIV/AIDS clinic in Kenya, which received follow-on funding for completion and now serves thousands of patients.

INVESTING IN CFAR — FOR ALL OF US

An investment in CFAR is an investment in the health and well-being of all of us.

Understanding HIV contributes to our knowledge of other diseases, such as tuberculosis and cancer, and control of HIV/AIDS is essential for global progress in other key sectors, including education, poverty reduction, international security, economic growth and international relations.

And, because the relatively low incidence of HIV in the U.S. means that much of the necessary research can be done more efficiently and with higher impact when conducted abroad, leveraging CFAR's global reach is imperative. Private funding is necessary to fill the gap between what the government supports and what CFAR needs to expand upon its current activities, including:

- **Pilot project funding** to support proof-of-concept research, particularly by early-career investigators, that can be leveraged for federal grants;
- **Building international HIV/AIDS clinics** to diagnose and treat those currently without access to treatment; and
- **Support for scientific working groups** to develop emerging areas of research.

With private investment, CFAR hopes to improve prevention of HIV, make advances in treating HIV and HIV-related chronic morbidities, and develop a cure. We invite you to partner in this vital work: ending the HIV/AIDS pandemic.

For more information, visit CFAR.washington.edu. To support CFAR, contact Deirdre Schwiesow at UW Medicine Advancement at 206.221.4769 or deirdres@uw.edu. Thank you for your interest in the UW/FHCRC Center for AIDS research.