

ology—the epidemic is concentrated among men who have sex with men (MSM) and has not “bridged” much to other groups—and to evaluate new treatment and prevention strategies. The scope and scale of the research enterprise is especially remarkable given the government’s foot-dragging when it comes to offering anti-HIV drugs to people who need them (see sidebar, right).

Only 0.6% of Peruvian adults were infected with HIV by the end of 2005, according to the Joint United Nations Programme on HIV/AIDS (UNAIDS). But studies suggest that the prevalence in Peruvian MSM—a group that includes many bisexuals who consider themselves heterosexual—is 10% in Iquitos and the surrounding area and more than twice as high in Lima. It’s on this group that researchers have focused their attention. “It’s a very concentrated epidemic, and we have a very good relationship with the community,” explains epidemiologist Jorge Sánchez, who runs Asociación Civil Impacta Salud y Educación (Impacta), a nongovernmental organization based in Lima.

Similarly, Carlos Cáceres, an epidemiologist at the Universidad Peruana Cayetano Heredia in Lima, has a team of AIDS researchers working closely with high-risk communities to evaluate behavioral interventions, viral spread, and strategies to reduce stigma and discrimination. “There’s a lot to be studied here,” says Cáceres.

Both Sánchez’s and Cáceres’s groups have strong ties to U.S. academics, participate in international multisite studies, and receive substantial funding from the U.S. National Institutes of Health (NIH). A challenge, says Cáceres, is ensuring that such collaborations serve both Peru’s own interests and those of the funder.

### Why Peru?

Many factors have contributed to Peru becoming a nexus of collaborative HIV/AIDS research, but explanations usually return to Sánchez and Cáceres. “There are great people here,” says Rubén Mayorga, the Lima-based UNAIDS country coordinator. “And there’s an acknowledgment that HIV is a big problem among gay men or men who have sex with men.”

Sánchez and Cáceres—who, to the frustration of many, have a strained relationship—command wide respect from colleagues around the world. Sánchez was the first of some 40 Peruvian researchers who were funded by NIH’s Fogarty International Center to train at the University of Washington (UW), Seattle, with King Holmes, a renowned expert on sexually transmitted diseases. Sánchez then headed Peru’s national AIDS program within the Ministry of Health. When he left, he took many members of his team and started Impacta. His group now collaborates with both UW and Grant’s lab at UCSF. Cáceres has a doctorate in public health from UC Berkeley and

works closely with Thomas Coates’s AIDS research team at UC Los Angeles.

Mayorga says Sánchez and Cáceres have a deep understanding of the communities that they are studying because they are both part of them. “I know exactly what it means to have a partner who weighs 40 kilos and you need to take him to shower because he cannot shower himself,” says Sánchez, who had a partner die of AIDS in 1990. “I cannot take my personal life out of my thinking.” Cáceres, too, says his per-



**Late stage.** Milton Ramírez needs antiretroviral drugs, but he must wait for test results before he’s eligible.

to about 70% of the infected people in the country, the problem is especially acute.

Take Iquitos, a jungle city in the north of the country that has a high HIV prevalence in men who have sex with men. The main hospital has repeatedly run out of anti-HIV drugs for the 110 people receiving the treatment. “The last 2 months, we didn’t have enough drugs to support our patients,” says Cesar Ramal Sayag, head of infectious diseases at the Regional Hospital of Loreto. Sayag says he also has to wait several weeks to receive results of tests for CD4 white blood cells—which must be air-shipped to Lima—and that government rules do not allow him to start patients on treatment without that information. “The national program will continue this way for 10 years, and they won’t change,” says a frustrated Sayag.

Across town at the Hogar Algo Bello, a hospice run by a Catholic priest, a 22-year-old gay man named Milton Ramírez is suffering from untreated late-stage AIDS. Ramírez has been ill for 2 years. And although two separate tests have confirmed his HIV infection, his blood was drawn to measure his CD4 cells just a few weeks ago, and his doctors are still waiting for results before they can treat him.

Marco Calixtro, a doctor in town at Asociación Civil Selva Amazónica, is part of the team that cares for Ramírez and other patients at the hospice. “It’s pathetic,” Calixtro says. Calixtro of course knows all about the government’s promise to provide antiretroviral drugs to everyone in need. But, he says, “when we look at a problem like Milton, it seems like all this stuff we hear isn’t actually real.”

—J.C.

sonal links to the community shape the way he does epidemiology. “It’s public health and prevention mixed with sexual rights and human rights and empowering the community,” he says.

Epidemiologist Javier Lama, a co-investigator with the NIH-sponsored HIV Vaccine Trials Network, says Peru is particularly poised to do prevention studies because of the high incidence, or rate of new infections, in MSM. Such high incidence rates, ranging from 3.5% in Iquitos to 6.2% in Lima, enable researchers to discern whether a prevention intervention works with relatively smaller, shorter trials

## Universal Access: More Goal Than Reality

LIMA AND IQUITOS, PERU—As much as Peru has taken a leading role in conducting HIV/AIDS research, the government has lagged when it comes to offering antiretroviral treatment to infected people. Peru didn’t begin providing free antiretroviral treatment to all in need until 2004—8 years after neighboring Brazil—and did so only after being prodded by a grant from the Global Fund to Treat AIDS, Tuberculosis, and Malaria. “They have pushed us to work faster,” acknowledges Pilar Mazzetti, the minister of health. “We’ve taken a long time to have a response.”

Some 7000 people now receive anti-HIV drugs in Peru, up from 2000 a mere 2 years ago. Robinson Cabello, who runs the Via Libre clinic in Lima and in years past helped his patients sue the government for access to anti-HIV drugs, says up to 20% of people who need antiretroviral drugs immediately still do not receive them. And outside Lima, which is home