SAAVI awards first AIDS vaccine grants

The South African AIDS Vaccine Initiative (SAAVI), a public–private initiative to produce a national HIV/AIDS vaccine (*Nature Med.* **5**, 252; 1999), has announced its first award recipients. Four research proposals were selected from a total of ten, and each will receive substantially more funding than that meted out by the country's other grant-giving bodies, which typically dispense R300,000–500,000 (US$50,000–83,000) per project.

Each proposal was evaluated by two non-South African referees. Two basic science projects (both targeting clade C which is the predominant HIV subtype in South Africa), one "Education and Advocacy" program and one "Ethical Issues in HIV/AIDS Vaccine Development" project were selected for funding. A fifth program of "Immunological Support" is to be subjected to further review before a funding decision is taken.

The projects have been allocated a combined total of R7 million from the R20 million SAAVI budget. William Malegapuru Makgoba, president of the South African Medical Research Council, which oversees SAAVI, told *Nature Medicine* that the remainder of the money will be held in reserve because SAAVI is hoping to support Phase I clinical trials in South Africa of the North Carolina company AlphaVax's Venezuelan equine encephalitis virus vaccine—a project that received $4.6 million funding from the International AIDS Vaccine Initiative last year (*Nature Med.* **5**, 5; 1999).

Both SAAVI basic research projects are lead by female scientists, a sign of changing times in South African research. Anna-Lise Williamson from the Health Sciences Faculty at the Observatory Cape Town, principal investigator and co-ordinator of one of the selected projects, told *Nature Medicine* that her team will receive R3 million for the first year, and is using *env* and *gag–pol* genes from a local HIV clade C isolate to construct vaccines based on recombinant BCG- and plant-derived virus-like particles.

"If these approaches are successful the technology already exists in South Africa to produce candidate vaccines, and they will be relatively inexpensive," says Williamson. The vaccines will be compared to modified vaccinia Ankara (MVA) and DNA vaccines expressing the same HIV subtype C genes. Combinations of different vaccines will then be assessed, using one to prime, and the other to boost, the immune response.

The second basic research project centers on a more unconventional approach and is lead by Estrelita Janse van Rensburg, head of the department of Medical Virology at the University of Stellenbosch. Her group receives R2 million and will focus on the development and production of HIV proteins by recombinant strains of filamentous fungi, *Aspergillus* sp. and *Pichia stipitis*. "The idea is to use the recombinant fungus vaccine in a prime-boost strategy, in combination with a subtype C DNA vaccine," says van Rensburg.

Rensburg's team also plans to clone *env* and *gag* genes of clade C isolates and, through collaboration with the US Department of Microbiology in the Faculty of Science, will establish fungal eukaryotic expression systems for the production of HIV proteins. In parallel, they will genotype the HLA of the lymphocytes used to determine the best, 'common' HIV-derived CTL epitopes. The predominant HLA types in South Africa are presently unknown and their elucidation will help not only South African vaccine R&D but also worldwide efforts.

Each project must re-apply for funding annually, and Makgoba has to submit a progress report to the Ministry of Health and the president every four months.

KAREN BIRMINGHAM, LONDON

PACHA adopts more lenient stance to government efforts

The President's Advisory Council on HIV/AIDS (PACHA), an advisory panel on AIDS research and policy, has a history of criticizing the government agencies charged with developing an AIDS vaccine and implementing policy for those infected with the virus (*Nature Med.* **4**, 477; 1998). However, there was a more conciliatory tone at this year's annual meeting held in Washington, D.C. on 4–5 October, and the 35-member panel went so far as to voice some support for current government initiatives in HIV/AIDS research and prevention.

One of PACHA's recurrent complaints in recent years has been the foot-dragging in staffing AIDS research leadership positions at the National Institutes of Health (NIH), including the absence of a director for the NIH's new Vaccine Research Center (VRC). However, Gary Nabel, who was appointed to the post in March (*Nature Med.* **5**, 362; 1999) addressed the group on the first morning of the meeting. He discussed VRC's structural organization, HIV vaccine development strategies, and noted that the hiring of several staff members with backgrounds in the pharmaceutical and biotechnology industries, a move PACHA had strongly urged previously, is imminent.

Although one speaker challenged that, at present, the VRC is just Nabel, a secretary, and some good will, Nabel assured *Nature Medicine* that, in the absence of a functional building on the NIH campus, his laboratory at the University of Michigan has become an off-site NIH laboratory. "We're in a position now where we can implement some [research] ideas," he says. For example, his laboratory could develop constructs for HIV vaccine research. The new building will be operational next year with around 120 laboratory scientists and support personnel.

The VRC's FY99 budget was $18.5 million and its FY00 budget is projected at $22 million. Nabel expects that when the VRC is fully operational, the annual budget will be around $30 million; but comments from PACHA members that this is a small amount of money if the center is to be involved in clinical trials, he agreed that PACHA was "right to be concerned that our costs can be higher."

Although PACHA has long requested that White House Office of National AIDS Policy increase its control over AIDS vaccine development initiatives, that has not happened. And with NIH making its leadership role in the development of an AIDS vaccine even clearer, as evidenced by Nabel's presence at the PACHA meeting, most do not believe PACHA's request, which once filled many basic scientists with angst, will reach fruition.

Deborah Birx, director of the U.S. Military HIV Research Program—a cooperative agreement between the

Walter Reed Army Institute of Research (WRAIR) and the not-for-profit Henry M. Jackson Foundation, which sponsors research into military related medical problems—presented the program's budget and progress.

This small but highly respected group has been in the forefront of HIV research despite its small budget: identifying genetic diversity in HIV strains worldwide, documenting dual infection with B and E clades, developing the first serotyping system, setting up a worldwide HIV surveillance network and establishing cohorts for HIV vaccine trials in Thailand and Uganda.

According to Sam Avrett, executive director of the AIDS Vaccine Advocacy Council (AVAC) in Washington D.C. the military program received a congressional 'plus-up,' or extra funding, from Congress that was not included in the president's budget of $15 million for FY96, 97 and 98. This brought their total funds for both basic and clinical research in HIV and HIV vaccines to around $40 million in 1998, according to AVAC's May 1999 report, *Eight Years and Counting: What Will Speed Development of an AIDS Vaccine?*

But in FY99, the plus-up disappeared. With an additional 10% cut in the budget to support the US military efforts in Kosovo, WRAIR was left with $17 million for the program—a 50% reduction in usable scientific funds. Birx's fears that there would be no Congressional plus-up in FY00 were allayed the day after the PACHA meeting, when Congress agreed to add $10 million to the budget, making an estimated $25.5 million available for the military program. But even with this money—a $5 million decrease in usable funds over FY98—WRAIR's HIV program remains underfunded.

PACHA was additionally concerned that a presidential initiative to budget $100 million for AIDS prevention, mainly in Sub-Saharan Africa, be passed by Congress. And the committee asked for more information about a planned series of meetings—the first one was held by Hillary Clinton in early September—between government officials, business and foundation leaders, and members of community organizations to enlist support for international AIDS programs and policies. PACHA members were invited to this meeting only at the last minute.

MYRNA WATANABE, WASHINGTON D.C.

Cloning regulators accused of operating in a vacuum

The move to ban human cloning without consideration of the legal and ethical issues surrounding reproductive technologies has prompted observers in Tokyo to call for the creation of an independent national bioethics committee. They say that, unlike other industrialized nations, Japan lacks guidelines on reproductive medicine with which to legislate against cloning.


Hiroo Imura

A law prohibiting cloning is expected to pass the Japanese parliament by year's end. It has been drafted in accordance with a report by a bioethics panel established two years ago by the Council for Science and Technology (CST)—an advisory body chaired by the Japanese prime minister.

Motoya Katsuki, a developmental biologist at the Institute of Medical Sciences, University of Tokyo, and a member of the CST's cloning and human embryo research committees, condones a cloning ban, but says "to forbid human cloning in the absence of any consensus on the general handling of human embryos is hasty and without rationale." He fears that some researchers could now exploit reproductive techniques, which have become a lucrative and expanding business in Japan.

But Hiroo Imura, a permanent member of council and former dean of Kyoto University, who chairs the CST's bioethics committee, defends the council's decision, arguing that it would have been unrealistic to aim for more comprehensive legislation: "Our goal was to deal with the issue of human cloning first." According to Imura, deliberations at the committee—the first proper bioethics advisory body in Japan—were protracted. Critics also counter that the CST's bioethics committee has yet to draft an agenda for its activities, a void seen by many as proof of the council's continued dependence on the Science and Technology Agency (STA).

Crunch-time for the committee should come with government reform in 2001, when the CST will have to operate independently of the STA. This will determine whether a bioethics committee with more extensive responsibilities than the present one, is required.

ROBERT TRIENDL, TOKYO

NCI strikes unique agreement with Ireland

Several senior members of the National Institutes of Health (NIH) descended on Belfast, Ireland last month, providing a show of solidarity for the NCI–All Ireland Cancer Agreement. The deal focuses on three areas: the enhancement and coordination of tumor registries in Ireland; improved informatics to support clinical trials throughout Ireland, and scholar exchange. The effort brings the Republic of Ireland and Northern Ireland together to fight the disease.


Richard Klausner

A conference held to mark the five-year agreement featured presentations by NIH Director Harold Varmus, National Cancer Institute (NCI) Director Richard Klausner, David Baltimore, Steve Rosenberg, Carmen Allegra, and the Chief Medical Officers of Northern Ireland and the Republic of Ireland.

Edison Liu, director of the NCI Division of Clinical Sciences, who was instrumental in organizing the conference, explained to *Nature Medicine* why Ireland is the obvious choice for American backing in the field of oncology and cancer research. According to Liu, recent re-structuring efforts as a result of studies in the early 1990's that highlighted the higher cancer mortality in the UK and Ireland compared with the rest of Europe, now mean that Ireland has superior clinical cancer care within Europe.

"In addition, the Irish oncologic community comprises many specialists that have trained in the US and know the mind-set and practice format. Thus, there are personal links," says Liu. One such link exists with Patrick Johnston, head of oncology at Belfast City Hospital, who organized the conference with Liu. Johnston worked at NCI for nine years, "because the training was better than I could receive in Europe."

Liu also points to the relative political and economic stability of Ireland at the present time; the harmonization of gov-