humans of a preparation that uses canary pox as a vector to deliver HIV proteins. Presenting the animal data will be NCI's Genoveffa Franchini, while the human work will be discussed by Gilles Pialoux from the Hospital of the Pasteur Institute.

A vaccine topic that has finally hit the big time this year is the cat model. Cats develop AIDS when infected with FIV, another HIV relative, and four sessions in Berlin will be devoted to discussing the model's merits. The cat model offers the advantage of being cheaper than primates, and thus more animals can be used in an experiment, increasing the likelihood of statistically significant results.

One of the conference's most intriguing sessions is sure to be the report on the results from the large-scale French-British AZT trial known as the "Concorde." The results conflict with the practice in the United States and elsewhere of treating healthy but infected people with AZT, and they will be carefully scrutinized.

News of preliminary data from the Concorde study attracted lots of media attention last April, but it paled next to the storm surrounding a *Nature* article 2 months earlier by Harvard's Yung-Kang Chow describing a way to possibly beat HIV drug resistance that Chow and his colleagues are calling "convergent combination therapy" (see p. 1258). Chow had a poster about this very idea at last year's international conference in Amsterdam, but his *two* oral presentations this year are sure to make a bigger splash.

The international AIDS conferences tend to have a surprising epidemiology story and this year's may well come from India. Both HIV-1 and HIV-2 have now been found in that country, as well as sample strains from nearly every known family of HIV-1. Shiv Lal from the National AIDS Control Organization in New Delhi, India, will be making the presentation.

That's much too short a summary to do justice to a week boasting 800 oral talks and 4500 posters. Then again, it would be a pity if the summary were exhaustive, since so much of the pleasure from a conference like the one in Berlin comes from the delicious feeling of finding a fascinating presentation in a session everyone else overlooked.

–J. C.

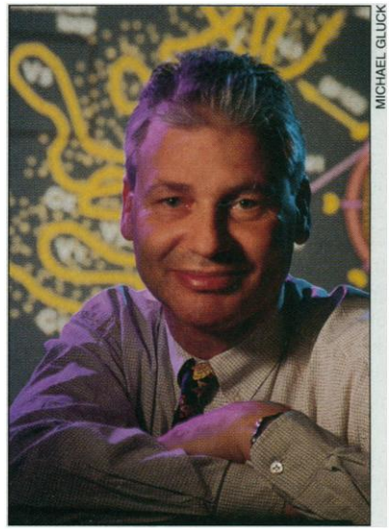
Flying Dutchman: Jaap Goudsmit

When you think of the centers of AIDS research, Paris may come to mind, or Bethesda, or San Francisco. One city that might not immediately suggest itself is Amsterdam. Yet, as the international AIDS conference in that city last year revealed, Amsterdam is packed with top-ranked scientists working on HIV. Our AIDS survey asked respondents to name significant European AIDS researchers and three of the 10 scientists mentioned most frequently hailed from that city. Atop the list, cited by nearly half the respondents, was Jaap Goudsmit.

A spirited 41-year-old virologist, Goudsmit represents the second wave of AIDS researchers, since he's spent his entire postdoctoral career working on HIV. A professor at the University of Amsterdam, where he earned his M.D. and Ph.D., Goudsmit is best known for elucidating the structure and function of the V3 loop, part of the protein that studs HIV's outer envelope. Many people think V3 is the key to HIV's effect on the immune system and to an AIDS vaccine. Important as it may be, V3 is far from exhausting Goudsmit's interests: His research has focused on everything from how HIV spreads through a community to how it spreads through an individual. "The red thread through it all is I'm studying in vivo," Goudsmit says.

Goudsmit, currently on sabbatical at New York's Aaron Diamond AIDS Research Center, spends more than one-third of his time attending conferences, where he's easy to spot. He's the one bounding from group to group, pulling slides from his pocket to make a point, picking brains, cajoling, debating. "I consider science a social event, a cultural event," says Goudsmit. "If that was not the way these meetings were, they'd be horrible." Says one of Goudsmit's closest collaborators and friends, Peter Nara of the National Cancer Institute, who is equally hard to keep in one place: "We both have a lot of energy and when we get together, it tires out our groups. We synergize."

In spite of his current zeal for AIDS research, Goudsmit had only a passing interest in viruses when he began work on his Ph.D. in 1978. Because he was interested in neurology, his adviser sent him to work under Carleton Gajdusek at the National Institutes of Health. Gajdusek had won the Nobel Prize 2 years earlier for work on kuru, a disease of the central nervous system that may be caused by a virus or by mysterious particles called prions. By the time Goudsmit left Gajdusek's lab in 1980, his passing interest in viruses had become a passion. And that wasn't the only thing the Nobel laureate had passed along to the young Dutchman. "Gajdusek taught me to look for exceptional things in your field," says Goudsmit. "AIDS is exceptional in its field."



MICHAEL GLUCK

In 1984, after completing his Ph.D., Goudsmit made a return visit to Gajdusek's lab specifically to work on HIV. When he returned to Amsterdam the next year, he began studies on a cohort of homosexual men that was assembled for research on a hepatitis B vaccine before the first case of AIDS even surfaced. Goudsmit's subsequent work—and that of all the other AIDS researchers in Amsterdam—has been closely linked to this unusual resource. Using blood samples from the cohort, Goudsmit began investigating antibody responses to HIV and how changes in antibody levels can track disease progression. He also began epidemiological studies of how the virus moved through this population.

The finding that Goudsmit is usually associated with, though—the one on the V3 loop—didn't come from that cohort. In fact, it was based on blood from a chimp that he infected during his days in Gajdusek's lab. From these blood samples, he discovered (as a few other labs did at the same time) that the V3 loop could stimulate production of antibodies that would latch onto HIV and "neutralize" it, preventing it from infecting cells. This finding powerfully influenced the field for several years—as vaccine makers concentrated on making the V3 loop the basis of their vaccines (see p. 1259).

For the last year, the eclectic Goudsmit has been focusing on another hot question in AIDS research, one that was first highlighted by his Amsterdam colleagues: the differences between strains of HIV that can cause the formation of syncytia (clumps of nonfunctional cells) and those that don't. This distinction could have implications for everything from disease progression to vaccine design (see p. 1260).

In the remaining months of his sabbatical, Goudsmit plans to write a book for lay audiences on the origin of HIV, focusing on the differences between primate and human AIDS viruses. After that he'll return to his lab in Amsterdam, which is rapidly becoming one of the capitals of AIDS research.

–J.C.