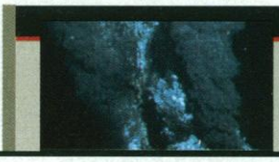
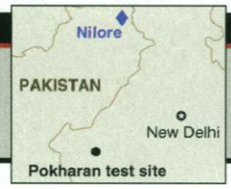


PAGE 1936
Deep-sea factory for protein precursors

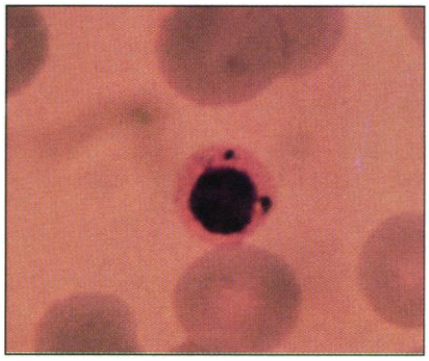


1939
India disputes bomb analyses

BIOMEDICAL POLICY

Raising the Stakes in the Race For New Malaria Drugs

A group of scientists and funders last week gave an initial thumbs-up to a new strategy for bankrolling what could amount to a $30-million-a-year program to develop drugs against malaria, one of the world's biggest scourges. Although details are still being worked out, drug company representatives and potential donors—who gathered at a closed-door meeting on 17 September at the Rockefeller Foundation in New York City—believe they have overcome key hurdles that undermined a similar effort last November. "Real offers of genuine cash are now on the table," says initiative proponent Trevor Jones, director-general of the Association of the British Pharmaceutical Industry.



In the cross hairs. Initiative would aim to produce a new malaria drug every 5 years.

If the plan stays on track, it would amount to a welcome reversal of fortune for public health officials. They have been clamoring for years for new drugs against malaria, a disease that kills up to 2.7 million people a year, mostly in developing countries. Because the disease strikes relatively few people in rich countries, it has failed to attract much interest from Western drug companies. To tackle this problem, the World Health Organization (WHO) and other groups last fall proposed that drug companies pool resources and invest the lion's share of funds needed to launch a nonprofit that would develop new treatments. But the effort began to unravel last November, when industry leaders balked, saying the $180 million project was too costly and that some companies were already developing malaria drugs (*Science*, 5 December 1997, p. 1704).

Taking a new tack, officials at the WHO and other organizations are soliciting support from foundations and other public sources. The idea is to create "the public-sector equivalent of a venture capital fund for one product," says Tim Evans, head of the health sciences division at the Rockefeller Foundation. Acknowledging that industry isn't likely to offer substantial cash, organizers of the project—dubbed Medicines for Malaria Venture (MMV)—plan to hit up companies and government agencies for in-kind support. Such contributions could include access to chemical libraries and other "technologies that don't exist in the public sector," says Robert Ridley, a malaria researcher at Hoffmann-La Roche in Basel, Switzerland, on leave to help WHO develop the project.

Like other venture capital funds, the MMV would look to bet heavily on labs that are poised to move a tested idea closer to the marketplace. It would disburse research funds competitively, most likely to academic groups teamed up with drug companies. Evans says the grantees would develop potential drugs to the point where they are ready for phase I clinical trials or an investigational new drug application. "That's the pump that we're trying to prime," he says. After that, the drug companies would run the show. The goal will be to develop on average one new drug every 5 years. Intellectual property rights would "be worked out on a case-by-case basis," Evans says, although he anticipates that some royalties would get plowed back into the fund to help sustain it.

The organizers hope to raise $15 million a year for starters and eventually ramp up to $30 million a year within 3 to 5 years. "That's probably the kind of commitment that would be required in the private sector to develop a drug," says John La Montagne, deputy director of the National Institute of Allergy and Infectious Diseases. Last week's meeting, held to drum up support from foundations, drew an enthusiastic response, participants say. "It was a pretty positive meeting," La Montagne says. Among the possible donors are the World Bank, the Rockefeller Foundation, and the United Kingdom's Department for International Development. Although organizers decline to comment on how much money has been committed so far, Ridley says enough funding is available "to get the show on the road in the coming year."

Lending impetus to the MMV is "Roll Back Malaria," a global campaign to cut malaria deaths by 75% by the year 2015 launched in May by new WHO director Gro Harlem Brundtland (*Science*, 26 June, p. 2067). The MMV is also expected to build on the Multilateral Initiative on Malaria, an international effort to coordinate malaria research funding. The stepped-up commitments from public health agencies will only help in building a groundswell of support for MMV among foundations and other potential players in the fight against malaria, says Evans: "There's a strong sense of optimism that there is really a window of opportunity" to make headway against this disease.

–JOCELYN KAISER

MICROSCOPY

Semiconductor Beacons Light Up Cell Structures

Quantum dots are all the rage among physicists and chemists. Now these multitalented flecks of semiconductor, which can serve as components in tiny transistors and emit light in rainbow hues, look set to catch biologists' eyes as well. In this issue of *Science*, two separate teams of researchers report using quantum dots as fluorescent tags capable of tracing specific proteins within cells.

Because dots that glow in different colors should be easier to use in tandem than combinations of conventional fluorescent dyes, "there's a real application here," says Louis Brus, a chemist and quantum-dot expert at Columbia University in New York City. "It's quite likely these particles will replace conventional organic dyes" for many applications. D. Lansing Taylor, a biologist who specializes in fluorescence imaging at Carnegie Mellon University in Pittsburgh, agrees. The new particles, he says, appear to have "important advantages."

The current generation of fluorescent tags, made from small organic dye molecules, can be toxic, they burn out quickly, and

ARTHUR M SIEGELMAN/VISUALS UNLIMITED