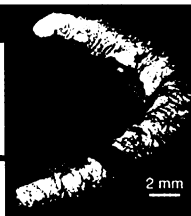


Virtually
the first
mollusk

White dwarfs
emerge from
the dark



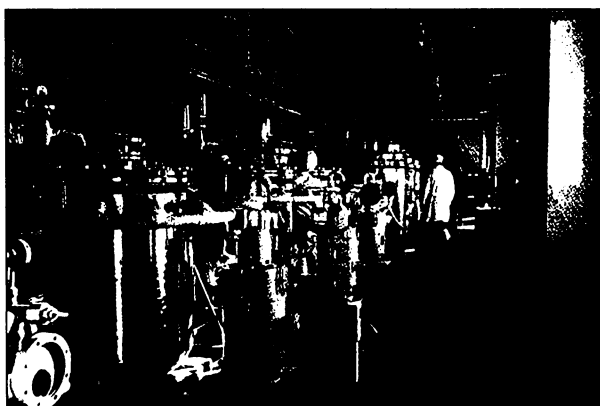
EMERGING DISEASES

Russia, NIH Float Big Plan for Former Soviet Bioweapons Lab

CAMBRIDGE, U.K.—A former bioweapons lab in the heart of Siberia may soon open its doors to scientists from around the world. The head of Russia's State Research Center of Virology and Biotechnology (VECTOR) will unveil a multimillion-dollar proposal next week at a forum in Atlanta to transform the lab—which features the only biosafety level 4 lab in Asia—into an international center for emerging diseases. The U.S. National Institutes of Health (NIH) is helping develop the proposal, which could become one of the most expensive projects ever to beat Russian scientific swords into plowshares. Many experts are supporting it, but some argue that a reincarnated VECTOR would not be able to sustain itself without a Western lifeline of non-competitive grants.

VECTOR's ambitious plan

would require about \$25 million up front to modernize its labs to create the center—which would open in 4 to 5 years—and up to \$12 million a year to operate it, says VECTOR general director Lev Sankhchiev. He is hoping to cobble together the money from a variety of sources, includ-



ing CNN founder Ted Turner and the World Health Organization, which is developing a plan to establish a network of up to a dozen such disease research centers in critical regions. Creating the facility—which would be called the International Center for the Study of Emerging and Reemerging Diseases (ICERID)—will be a challenge, but worth it, argues emerging disease expert Susan Fisher-Hoch of the University of Texas School of Public Health in Brownsville. "In the long term, we would all benefit" by tapping Russian talent, she says.

The effort to transform VECTOR is gaining momentum despite a gloomy outlook for U.S.-funded nonproliferation activities in Russia. The Bush Administration's 2002 budget proposal would cut by nearly 10% the \$870 million clutch of Russian nonproliferation programs, which had been slated to increase to \$1.2 billion under the Clinton Administration's budget proposal. Backers of ICERID—including the U.S. State Department—hope that the diversity of potential funders will insulate the venture from U.S. budget cuts.

Brewing collaboration. Center could adopt VECTOR's fermenters.

Uncertainty on Bioweapons Treaty

In the depths of the Cold War, the United States made a remarkable decision: It renounced biological weapons, stopped its R&D program, and urged other countries to do the same. About 140 followed this lead, supporting a general ban, the Biological and Toxin Weapons Convention (BTWC) of 1972. But the treaty has a flaw: It lacks an enforcement system, relying instead on public pressure to keep countries honest. Diplomats and technical experts have been struggling for years to come up with a better way of enforcing the BTWC. But their self-imposed deadline for reaching an agreement is looming, and observers fear that negotiations may end this summer with no consensus. That could

cast a pall over the BTWC, which is due for a full international review in November.

At a small meeting sponsored by the Carnegie Corp. earlier this month in Washington, D.C., Barbara Hatch Rosenberg, a microbiologist who leads a BTWC verification working group for the Federation of American Scientists in Washington, D.C., gave a bleak report. "The negotiations [on a protocol for verifying BTWC compliance] are certain to go on the back burner for the next 4 years or more," she predicted, unless the parties reach agreement in the 7 weeks set aside for these talks in April-May and July-August. She criticized the Clinton Administration for its "passivity" on BTWC and expressed concern that the Bush Administration—which is reviewing its policy this spring—

has a "well-known antipathy to multilateral arms treaties."

"Everyone is waiting" to find out what the Bush policy will be, says Amy Smithson, a bioweapons specialist at the Henry L. Stimson Center in Washington, D.C., adding that, "It's like waiting at a wake." Smithson, who has examined the infrastructure left behind by the Soviet Union's cheating on the BTWC in the 1980s, claims that the U.S. and other governments "haven't done their homework" on technical issues in BTWC enforcement. The resulting lack of data, she argues, has made it more difficult to agree on a protocol.

Gillian Woollett, a BTWC expert at the Pharmaceutical Research and Manufacturers of America, says it is risky to view the November BTWC review as a "make or break" deadline, be-

cause compromises made under pressure may lead to a flawed protocol. "We do not think that the only choice is to accept a bad protocol or no protocol." U.S., European, and Japanese industry leaders have agreed on a model approach that would not use surprise onsite visits or routine inspection of industry labs, Woollett says, adding: "We would like to see a good protocol adopted," even if that can't be done by November.

Because the schedule is so tight, most observers doubt that a strong enforcement regime will be in hand by November. But Donald Mahley, the U.S. representative to the negotiations and chair of the Bush policy review on BTWC, argues it's too early to declare the protocol dead, saying, "It's not over until it's over." —ELIOT MARSHALL

CREDIT: VECTOR