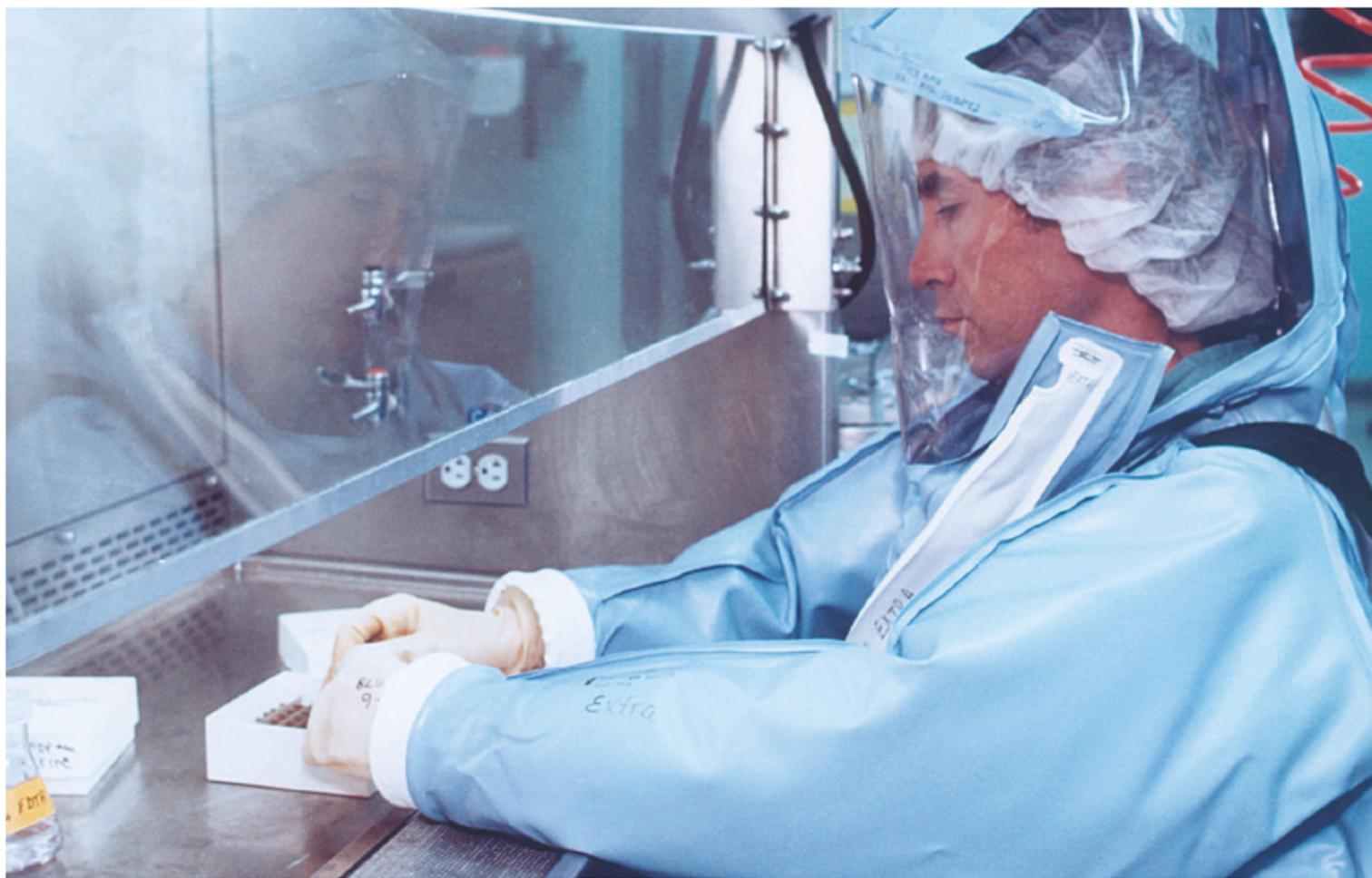


NEWS



Locals rally to combat biodefence labs

As the US government picks up the pace of building high-security biodefence laboratories, community groups and watchdogs are ramping up their protests.

The latest clash centres on Fort Detrick, an army facility in Frederick, Maryland, that has long been home to biosecurity labs. The government is planning to overhaul the existing facilities and build a new biodefence research complex. Construction has already begun on one component: the Department of Homeland Security's National Biodefence Analysis and Countermeasures Center (NBACC). This is slated for completion in June 2008.

But critics want to halt work on this facility and others in the works nationwide. On 30 August, opponents were scheduled to air their concerns at a public meeting in Frederick about Fort Detrick's expansion.

"From almost any way of looking at it, this makes absolutely no sense," says Barry Kissin, a lawyer and congressional candidate from

Frederick, about the planned facility. "This does the opposite of provide for our security, at great expense and great hazard."

Although local communities often protest about biodefence labs in their midst, the \$105-million NBACC does stand out. Plans inadvertently posted on the Internet suggest that personnel there will conduct exercises known as 'red-teaming'. These would involve creating and testing biothreat agents thought to belong to enemy arsenals. The Department of Homeland Security is also attempting to classify the facility, which means activities there would be off-limits to public enquiry.

The NBACC will include labs operating at the highest biosecurity level — biosafety level 4 — which handle the deadliest pathogens. This would be in addition to several biosafety

level 4 facilities already in existence at the Fort Detrick campus. But critics say more labs will increase the threat to the surrounding community — they say pathogens could escape or be removed surreptitiously from the labs. Anthrax that was used in the unsolved mail attacks of late 2001, for instance, is thought to have come from a research lab.

Opponents also charge that the facility runs the risk of spurring other countries to ramp up biowarfare activities: unless inspectors are allowed to investigate the site, some might suspect the United States of creating offensive weapons.

"It's a really big mistake to classify the entire NBACC facility," says Alan Pearson, an expert on biological weapons at the Center for Arms Control and Non-proliferation in Washington DC. "Clearly there are going to be some aspects of the work

"How will the United States assure the world that its research is defensive if it's being conducted at a classified nuclear-weapons laboratory?"



SHUTTLELAUNCH

For updates on Atlantis, read our newsblog coverage on line.

www.nature.com/news

T. CRYDNER/NASA

Danger signals: the number of US labs that can handle deadly pathogens is rising.

that ought to be classified, but those ought to be minimal. Otherwise you start generating suspicions and, frankly, generating excuses for other countries."

The department says that classification is necessary to prevent other nations from obtaining information about US weak points. "Providing a secure environment for the handling of sensitive information in this way makes sense, and will not allow our enemies to gain the advantage should vulnerabilities be revealed," says Christopher Kelly, a spokesman for the department.

Critics are also worried that the Department of Homeland Security could attempt to classify another project it has in the works: a \$450-million complex of high-biosecurity labs and testing grounds called the National Bio and Agro-Defense Facility. The department is holding a nationwide competition to determine where the lab will be located; 12 sites remain in the running. Kelly says the department has no plans to classify the complex in question. But one site that has made the shortlist is the Lawrence Livermore National Laboratory in California — which is already a classified facility.

"How will the United States assure the rest of the world that the research is completely defensive if it's being conducted at a classified nuclear-weapons laboratory?" asks Marylia Kelley, executive director of Tri-Valley CAREs, a Livermore-based group that monitors the national laboratory.

NBACC and the bio-agro facility are just part of a recent boom in biodefence spending in the United States. The federal government has spent \$36 billion to combat bioterrorism since the terrorist attacks of 11 September 2001, according to an analysis by the Center for Arms Control and Non-proliferation. Three additional biosafety level 4 labs are in the works, including one at Boston University in Massachusetts that has been heavily protested. Fourteen new biosecurity level 2 and 3 labs are also planned.

Pearson argues that the country should spend more on working to prevent bioterrorism in the first place, by strengthening the United Nations' biological and chemical weapons conventions, and improving supervision of its own research. "It wouldn't take much money to strengthen prevention," he says, "and it would do a lot more to keep us safe."

Erika Check

Plan to pool bird-flu data takes off

A bid by leading researchers to bring into the open data on bird flu that were previously kept behind closed doors has met with cautious optimism from observers.

Some 70 avian-flu scientists from all corners of the globe have signed up to the Global Initiative on Sharing Avian Influenza Data (GISAID). A letter outlining the agreement was published online last week in *Nature* and appears in this week's issue (see page 981).

The move aims to resolve issues that have seen some countries and organizations come under fire for hoarding genetic information about avian flu strains. The reasons for their reluctance to share are varied: some, for example, fear that others might use the data without properly crediting the researchers involved. And there were concerns over whether other countries worst hit by bird flu would benefit from the drugs and vaccines developed from the sequences they provide.

Precise details of the GISAID agreement are still being thrashed out. But the idea is that participants will place genetic data into secure sections of existing online databases as soon as possible after producing and analysing them.

Peter Palese, who studies flu

viruses at Mount Sinai School of Medicine in New York, describes GISAID as "a very positive development". There are signatories from many of the countries affected by bird flu, including China, Indonesia, Thailand and Vietnam. And the Indonesian government has thrown its support behind free access to data. But Palese questions whether the agreement will work without the full involvement of all the scientists and governments in these countries.

Menno de Jong, an avian-flu researcher at the Hospital for Tropical Diseases in Ho Chi Minh City, Vietnam, also welcomes the initiative. But he cautions that care should be taken to ensure GISAID doesn't become "another, albeit bigger, old boys' network". He suggests that increasing the capacity of poor countries affected by the disease to do their own research, enabling them to be more equal partners in collaborations, might be an extra encouragement for them to share their data.

GISAID proposes pooling its data using the International Nucleotide Sequence Database Collaboration, a network of three major public databases. The data will initially be accessible only to researchers

who have signed up to GISAID, but the information will become open to the public no more than six months after it is deposited.

GISAID members have also agreed to collaborate with, and appropriately credit, all relevant researchers in any resulting publications and intellectual-property agreements.

Clinical and epidemiological data are included in the agreement. The hope is that researchers will be able to compare new strains against others quickly, for example to track whether a virus is acquiring mutations or becoming resistant to drugs.

Until now, access to many genetic sequences has been restricted to a global network of flu labs associated with the World Health Organization (WHO). Dick Thompson, WHO spokesman in Geneva, says that the organization supports the sharing of sequence data. He notes that the WHO has sometimes been portrayed as wanting to keep data secret but says that is not the case.

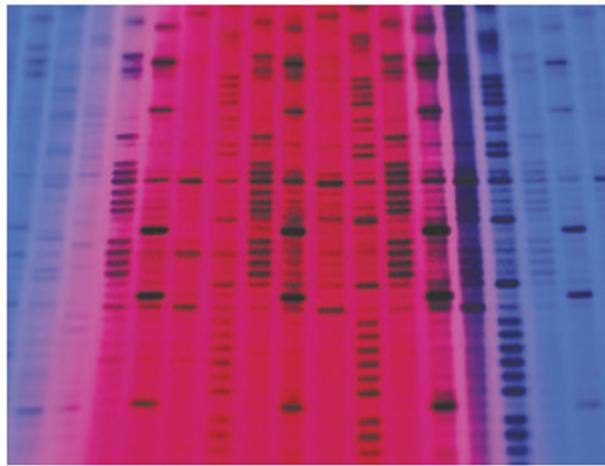
"Sometimes countries have legitimate reservations and we have to work with that," he says.

John Sulston, of the Wellcome Trust Sanger Institute in Cambridge, UK, says that he supports GISAID as a compromise. But he adds that because bird flu is spreading around the globe so fast, "I still think it's a good idea to release data immediately."

But virologist Ilaria Capua at the Experimental Animal Healthcare Institute in Padua, Italy, who campaigned for the initiative with Hollywood media adviser Peter Bogner, says she is very happy with the result. She adds that the framework could be used for other emerging infectious diseases. "If a new SARS knocks on our door, we have a system in place."

Helen Pearson

K. CURTIS/SP/L



Lining up: access to DNA sequence data is vital for fighting bird flu.