

made from a killed virus. Other proposed strategies include using a live, attenuated virus—often more potent but also more dangerous—as well as protein and DNA vaccines. Which weapon might work best is anyone's guess, however. Some researchers also worry that a vaccine might actually worsen SARS through an interaction with the immune system, as can a vaccine for another coronavirus disease, feline infectious peritonitis. Although researchers would like to understand better how the virus makes people sick and the role of the immune system, “we can't afford the luxury of sitting back and waiting for the answers,” said Robert

Couch of Baylor College of Medicine in Houston. “We have to move forward.”

But science costs money, and it's not clear who will pay. NIAID has opened up a few opportunities and added SARS to an existing grants program aimed at biodefense and emerging diseases. It has also tacked \$420,000 onto an existing HIV vaccine award to GenVec for a SARS vaccine that uses an adenovirus as a vector. But most companies and academic researchers are still doing the SARS work on their own dime, hastily rearranging priorities and funding. For studies to expand, some researchers say, the government will have to pony up. If the

market for a SARS vaccine turns out to be small, says Thomas Monath, chief scientific officer of the British-American vaccine company Acambis, industry may also need a guaranteed purchase of its product or some other sort of carrot to stay in the race.

Both Congress and President George W. Bush are acutely aware of the SARS threat, says Fauci, adding that “my job over the next couple of months” will be to obtain additional federal funding for SARS research. He hopes that the money won't come at the expense of the institute's vast bioterrorism program, which involves many of the same researchers and companies. —**MARTIN ENSERINK**

## POSTWAR IRAQ

# Assyrian Gold Safe as Looters Threaten Southern Sites

**BAGHDAD**—Five damp boxes containing the gold jewelry of ancient Assyrian queens are intact at an undisclosed safe location in Baghdad. *Science* has learned that the bulk of the Iraq National Museum's most precious artifacts are likewise secure in a secret storage area on the museum grounds. That's the good news, say U.S. and Iraqi officials, and it contrasts with reports of extensive losses during the initial days of the U.S. arrival in the capital. But the country's rich cultural heritage faces a new and terrible threat, say archaeologists: In recent weeks they have witnessed hundreds of looters pillaging sites throughout southern Iraq.

National Museum officials here are now laboriously conducting an inventory of their losses; the current count stands at a little over 1000 items. But U.S. Customs and Iraqi officials say that most objects once displayed in public galleries were moved to an air-raid shelter at an undisclosed location on the museum grounds before the first shots were fired. An Iraqi official confirmed the existence of the cache to *Science*, but museum officials decline to identify the location for security reasons. U.S. investigators say they have sworn testimony about the place from five museum employees but are keeping their distance.

Across the Tigris River, a delegation of Iraqi and U.S. officials this week opened the Central Bank vault, where the spectacular Nimrud grave goods have been stored since 1991. The hundreds of pieces of finely worked gold material have until now been seen by only a handful of archaeologists. The vault area flooded when the bank was bombed and looted this spring, and it took weeks to pump out the water. But the officials found the boxes with their seals intact, and as *Science* went to

press they were planning to examine the contents after moving them to a secure location.

Outside Baghdad, however, the situation remains chaotic. The scale of the looting in the south is unprecedented, according to a team of U.S. officials, soldiers, and archaeologists who toured the area on 21 May in a U.S. military helicopter. The ancient site of Umm Al-Hafriyat “looks like a huge waffle” because of looting holes, says McGuire Gibson, a University of Chicago archaeologist on the flight. At the nearby mound of Adab, “there were 200 to 300 guys with shovels,” he says. The chopper landed at Umma, an important Sumerian city, and U.S. soldiers fired shots to chase off another band of 200 to 300 looters who had been busy digging trenches

and tunnels. Likewise, a huge number of illicit diggers were chased from the ancient site of Isin. “It's phenomenal what's been done,” says Gibson. Although looting occurred at remote sites in the mid-1990s, U.S. and Iraqi researchers say the problem is much worse now.

Compared to the drama unfolding in the south, “the north is much better off,” says Jaber Khalil, chair of Iraq's State Board of Antiquities, who had just returned from a visit to that region with U.S. officials. The Mosul Museum storerooms were looted, although “we have no estimation yet of the losses,” he says. At nearby Nineveh and Nimrud, pieces of Assyrian stone friezes—potentially worth millions of dollars on the antiquities market—have been removed or damaged, Khalil added. A U.S. military unit near the Mosul Museum offers some protection there, and U.S. troops are posted at Nimrud around the clock. But guards remain only until sunset at Nineveh. U.S. troops also have secured Hatra, an important religious center northwest of Mosul that flourished around A.D. 200.

Halting the illicit digging is a formidable task, because U.S. troops are focused on preserving order in the cities and vehicles leaving the country are seldom searched. Small objects such as seals or cuneiform tablets are extremely valuable and easily transportable, and Iraqis say that antiquities markets are popping up everywhere in the south. The State Board staff members, meanwhile, have no cars, communications equipment, or money for guards at distant sites. Military officials are weighing the use of helicopter and satellite reconnaissance, according to U.S. Army Col. John Kessel in Baghdad, although their effectiveness will be limited without more frequent intervention.

In the meantime, officials expect the bleeding of archaeological objects to continue. Says Gibson: “It's going to be a very, very trying time.” —**ANDREW LAWLER**

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**Digging out.** Illicit looters have taken advantage of the chaos following the U.S. invasion to pilfer ancient sites such as this one in Isan Bakhriat.

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