



Together again. Wads of clay show where both femurs were broken.

Jelders in Portland, Oregon, will toss the Kennewick find back into their domain.

Kennewick Man's bones are well traveled. Shortly after they were found, they were seized by the U.S. Army Corps of Engineers in response to concerns from Native Americans. Stashed in the county coroner's office, then sent to Battelle Pacific Northwest National Laboratory in Richland, Washington, the bones are now stowed at Burke Museum in Seattle.

An inventory taken at Battelle in 1997 revealed that most of Kennewick's thighbones—two pieces from each femur—were absent. Now they have apparently reappeared as mysteriously as they vanished. Richland anthropologist James Chatters, who studied the bones before the government took them, says workers demolishing an old storage building used by the sheriff found them in the coroner's evidence locker—in a box labeled as containing some other Columbia River bones that had been returned to Indians for burial in 1998.

"I'm utterly baffled," says Chatters, who notes that the FBI ransacked the sheriff's locker in a search for the bones in 1998. So is Michael Trimble, chief curator for the corps, who says "I haven't a clue" how they turned up again.

FBI spokesperson Roberta Burroughs says the bones have been tentatively identified through comparison with photos. The FBI is awaiting approval from the U.S. attorney's office before returning them to the corps.

Chatters says that the femurs should yield information about racial origins, because the femoral head in American Indians is more highly rotated in relation to the shaft than it is in Europeans. But the U.S. legal system will ultimately decide whether scientists will have another go at them. —CONSTANCE HOLDEN

NEWS OF THE WEEK

NEUROSCIENCE

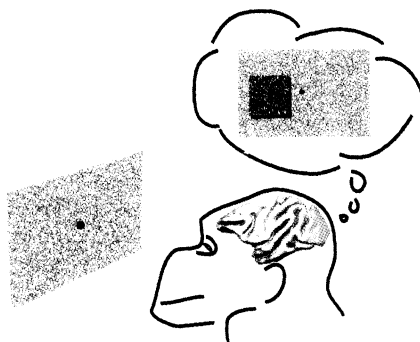
Neurons Fix Memories In the Mind's Eye

When a monkey has to remember something, it holds that thought in its mind's eye, a new study suggests. Earlier memory research showed that higher order brain regions such as the frontal lobes buzz madly when monkeys (and people) remember something briefly. But this study, which appears on page 120, is the first to show that even the lowest level, workaday region of the visual cortex also hums with anticipation while maintaining a memory. The researchers suggest that this part of the brain holds on to a simple sensation that helps guide more sophisticated parts of the memory system.

The work comes from Hans Supér and colleagues at the University of Amsterdam in the Netherlands, who looked at the responses of neurons in the primary visual cortex (V1) while animals were engaged in a test of working memory. This type of memory holds information at the ready, temporarily, while an animal prepares to act. The prototypical example is reciting a telephone number while walking from the phone book to the phone to dial.

Neurobiologists used to think that V1 simply sorts incoming visual information before passing it on to higher brain centers for interpretation. As vision scientist Jeffrey Schall of Vanderbilt University in Nashville, Tennessee, points out, the brain area is "just one step removed from the retina." But the Supér team showed that neurons in V1 actively store memories of an image, briefly holding them until the animal makes the appropriate response.

The result follows other studies in the past several years showing that V1 neurons aren't simple receptacles of light and shadow. For example, neurons in V1 fire more enthusiastically in response to a stimulus that tells a monkey how to get food than to an irrelevant stimulus. Now this study shows that V1 neurons don't even need a stimulus—they con-



You must remember this. Neurons in V1 (red) fire to a remembered stimulus even after it vanishes.

ScienceScope

Torn Loyalties A nasty fight is brewing between the Bush Administration and Congress over who should administer proposed math and science education partnerships involving universities, schools, and industry (*Science*, 25 May, p. 1463). Hundreds of millions of dollars are at stake, and the National Science Foundation (NSF) is caught in the crossfire.

The House Science Committee last month passed a bill that would put universities in the driver's seat by funneling federal funds to academics and nonprofits working with the schools. That time-tested approach is fine with NSF officials, sources say. But some Administration officials object, and in a 19 June letter to congressional leaders, NSF director Rita Colwell followed her bosses' wishes and argued that the program should give awards directly to state and local school districts. They are "closer to the needs of students" and more accountable for their performance, Colwell wrote. She also complained that a larger education reform bill moving through Congress goes against the Administration's plans by putting the Department of Education—and not NSF—in charge of the partnerships.

The disagreement won't be resolved until Congress finishes the education package later this year.

Money Talk A proposal to charge researchers up to \$500 to post their papers on a free-access Web site is drawing mixed reviews from scientists. BioMed Central—a free online publisher—last week said that it is mulling a sliding scale for author charges. Publisher Jan Velterop says the charges will help maximize the distribution of papers and eventually reduce the amount of money that the scientific community overall spends on publishing fees and journal subscriptions.

The fee idea is backed by the Public Library of Science (PLOS), an advocacy group that has challenged journal publishers (including AAAS, publisher of *Science*) to provide free access to back issues (*Science*, 23 March, p. 2318). But in an online debate on the proposal (www.biomedcentral.com/editorial/charges.asp), some researchers argue that a fee will drive researchers to submit their best work to commercial journals that have no charges and will possibly drive up costs in the short run, as institutions pay both to publish and maintain subscriptions. If BioMed Central does impose the fees, officials say they would come no earlier than 2002.

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