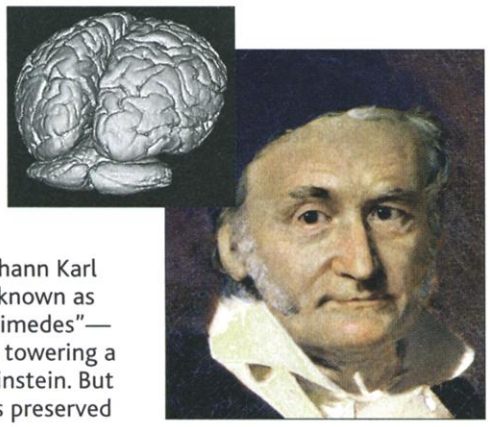
Gauss: Just Another Brain



Gauss and 3D image of his brain.

Mathematician Johann Karl Friedrich Gauss—known as "the German Archimedes"—may have been as towering a genius as Albert Einstein. But unlike Einstein, his preserved brain looks just like anyone else's, researchers have found.

In a paper published in the 1999 *Proceedings of the Gauss Society*, researchers at the Max Planck Institute for Biophysical Chemistry and the University of Göttingen said they detected nothing unusual when they analyzed Gauss's brain using magnetic resonance tomography. His brain, unimpaired to the end, was preserved in alcohol shortly after his death in Göttingen in 1855 at age 78.

"In contrast to last year's examination of Einstein's brain, we did not find anything unusual about Gauss's brain," says Wolfgang Hänicke, a mathematician who co-authored the paper with astrophysicist Axel D. Wittmann and physicist Jens Frahm. Last year, in a paper published in *The Lancet*, Canadian researchers reported that Einstein's brain had a "unique morphology" of the sylvian fissure, one of the main clefts dividing the brain, which was associated with unusually large inferior parietal lobes. They theorized that this morphology contributed to Einstein's extraordinary ability to think visually and synthetically.

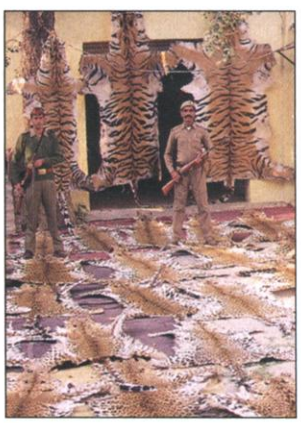
More Tests for K Man

In keeping with the glacial pace of its dealings with Kennewick Man, the government has asked for a 4-month extension of a court-imposed deadline so it can try to get some DNA out of the ancient bones.

Last month, the Interior Department announced that the bones found in 1996 on the banks of Washington's Columbia River are more than 9000 years old—confirming what scientists established almost 4 years ago. Having ascertained that the bones are indeed those of a "Native American"—defined by Interior as anyone who was in America before the Europeans took over—officials gave four university anthropologists a month to gather information on whether the remains are "culturally affiliated" to existing tribes.

On 1 February, however, after getting a report from two DNA experts, officials decided that DNA testing will be necessary to address the question. As that will entail consultations with five tribes, it will take about 6 months. The Justice Department has therefore requested a 4-month extension to the 24 March deadline imposed last fall by a U.S. District Court judge in Portland, Oregon, for the government to respond to a long-running suit by scientists who want access to the remains. "We're very appalled that they're trying to drag their feet again," says the scientists' lawyer, Alan Schneider of Portland. He promises "a response opposing the extension in the next week or two."

The likelihood of getting informative DNA from the bones is slim, according to the government's experts, Noreen Tuross of the Smithsonian Institution and Connie Kolman of the National Institutes of Health. In their report, posted at www.cr.nps.gov/aad/kennewick, they say that even if suitable DNA remains in the bone, and the test escapes contamination, the results stand a good chance of being "ambiguous."



Fruits of recent leopard and tiger seizure in Uttar Pradesh.

DNA Test to Thwart Tiger Trade?

British researchers say they are developing a DNA test that could help nab those who illegally trade in tiger products. And three recent raids in India that confiscated huge caches of tiger bones and hides suggest that the need for such policing tools is greater than ever.

"Tigers are so highly endangered that they may soon be extinct in the wild," says Robert Hepworth of the United Kingdom's Department of the Environment. Last month, he led a three-member United Nations team that visited India and Japan to assess ways of stemming the illegal trade in tiger parts, which are highly valued by makers of traditional Asian medicines. Although officials can seize medicines that list tiger bone as an ingredient, they need proof of its presence to get criminal convictions. A tiger DNA test would be a "great boon" for law enforcement, says Hepworth.

Jon Wetton and his coworkers at the Forensic Science Service believe that amplifying fragments of the cytochrome b gene of the tiger's mitochondrial DNA may fill the bill. The test can detect "as few as 10 tiger cytochrome b gene fragments, considerably fewer than are present in a single cell," says Wetton. Tiger blood, hair, and bone samples have all generated positive results, he says. The researchers are currently spiking Chinese medicines with progressively smaller doses of tiger bone to determine the limits of the test's sensitivity. Once they succeed, the next test may come in a courtroom.

All's Well That Ends Well

You must burn a little bit before catapulting into the arms of Eros, as NASA has learned the hard way. The Near Earth Asteroid Rendezvous (NEAR) mission almost caused heartbreak last week as it failed to perform an orbit-correcting engine burn to bring it near its intended target, asteroid 433 Eros.

A little more than a year ago, the NEAR spacecraft, designed to examine Eros at close quarters, aborted an engine burn intended to put it in orbit around the asteroid. But accelerometer readings caused the craft to enter "safe mode," and the rendezvous was abandoned. NASA rescheduled the star-crossed tryst for 14 February 2000. But on 2 February, NEAR, like a shy lover, balked when told to make its long-delayed course-correction burn. Unlike many love stories, though, this one appears to have a happy ending. On 3 February, NEAR finally got fired up and corrected its orbit in time for a Valentine's Day consummation.

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