

Answer to apnea?

## A BLOW FOR SLEEP

Snoring and sleep apnea—brief episodes of nonbreathing—both involve the collapse of upper airways. To keep them open, patients often resort to nose masks that administer pressurized air while they sleep. But a team of Swiss researchers has found that playing the didgeridoo, an Australian aboriginal horn, may be an alternative. Twenty-five apnea patients were randomly assigned to didgeridoo lessons or a waiting list. After four months, the players showed “significant” reduction in daytime sleepiness over the controls, and their sleeping partners reported much quieter nights, the researchers reported online last month in the *British Medical Journal*.

Didgeridoos require an unusual system of circular breathing—the player inhales through the nose while blowing out from puffed cheeks so a sustained note can be held. The researchers speculate that this exercise helps strengthen the muscles in the upper airways.

## A New APS >>

The American Psychological Society (APS), which broke off 18 years ago from the American Psychological Association (APA), has now officially put “science” in its name. In a vote put to members, 86% opted to become the Association for Psychological Science. As researchers and science-based practitioners, says Alan Kraut, executive director of the Washington, D.C.–based group, it is APS members who are “the rightful heirs to the traditions of William James ... and the other founders of APA.”

Kraut says that when the name vote came up, members welcomed the chance to further distance themselves from the APA, complaining that that organization was promoting therapies and coming out with policy statements—such as a stand against the use of Native Americans as symbols for athletic teams—poorly grounded in research. Not so, says APA’s Rhea Farberman. “Science and research are the guiding principles of all that APA does.”

## AN IRISH Y

A study done in 2003 concluded that some 16 million males now living in East Asia could be descendants of Genghis Khan (*Science*, 21 February 2003, p. 1179). Now a group at Trinity College in Dublin has uncovered a similar warlord effect in Ireland.

Around 500 C.E., the Irish warlord Niall of the Nine Hostages founded the most powerful ruling dynasty in Irish medieval history, the Uí Néill (literally “descendants of Niall”). A study by geneticist Daniel Bradley and colleagues reveals that this lineage may be imprinted in the genes of roughly a tenth of Irish men living today.

The scientists analyzed the Y chromosomes of 796 Irish men and discovered that many shared a set of DNA markers; this genetic signature was most prevalent in northwest Ireland. It was also strongly associated with surnames tied to the Uí Néill. Judging by mutation rates, the scientists estimated that the men share a male ancestor who lived approximately 1700 years ago—roughly consistent with when Niall lived, the team reported last month in the *American Journal of Human Genetics*.

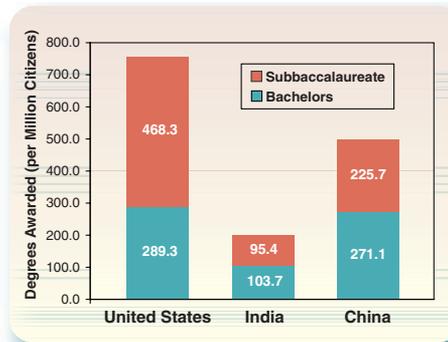
Geneticist Mark Jobling of the University of Leicester, U.K., says the work “looks pretty convincing,” but adds that pinpointing the time of a common ancestor is highly uncertain. The study can’t prove that Niall himself had the signature Y; nonetheless, it hints at how a single alpha male can have profound effects on a gene pool.



The “Mound of Hostages” named for Niall.

## ENGINEERED NUMBERS?

A new study suggests that data used to bolster claims that the United States is losing its technological edge over other countries are off the mark.



It has been widely quoted that the U.S. awards only 70,000 B.S. engineering degrees each year, whereas India churns out 350,000 and China 650,000. The National Research Council cited the numbers in a recent report on the U.S. need to beef up its scientific talent pool, and senators flogged them last month in introducing a bill to increase U.S. support for science. But a group at Duke

University group led by sociologist Gary Gereffi and high tech entrepreneur Vivek Wadhwa suggests that any degree disparity may actually favor the U.S.

After much legwork, the researchers obtained degree data from India’s National Association of Software and Service Companies, China’s Ministry of Education, and individual universities in both countries. The numbers, it turned out, include information technology and computer science degrees, as well as graduates of 2- and 3-year programs. When the researchers broadened the U.S. definition of engineering degrees accordingly, the U.S. total grew threefold, to 221,000 degrees ([memp.pratt.duke.edu/outourcing](http://memp.pratt.duke.edu/outourcing)). The group also found that India’s figures double-counted many students and were based on estimated enrollments, suggesting that 215,000 would be more accurate.

A revised per capita comparison gives the United States a considerable lead over both countries (see graphic, above). Gereffi says that the data don’t change the fact that the United States should be concerned about its competitiveness. “I’m not saying we don’t have a problem,” he says. “All we wanted to do is set the record straight.”