

RANDOM SAMPLES

Edited by Constance Holden

Rats Tell Polynesian Story

Tracing the origins of the Pacific Islanders is difficult: The DNA of modern Polynesians is too diluted for use, and tribal taboos prevent scientists from taking DNA samples from ancient remains. So scientists instead are studying DNA from fellow travelers: the rats early Polynesians loved to eat.

The earliest Polynesian culture, the so-called Lapita culture, appeared on islands off New Guinea about 3500 years ago and swept across the Pacific Ocean. Some scientists believe the culture arose on those islands; others claim that Polynesians swept into Oceania from Taiwan.

To test the two theories, a group led by biological anthropologist Lisa Matisoo-Smith of the University of Auckland in New Zealand teased DNA fragments out of ancient rat remains from Lapita deposits all over the Pacific as well as modern museum specimens from Southeast Asia. They found that today's Southeast Asian rats are only distantly related to the ancient rats, whereas the ancient DNA matches much better with that from rats on islands west of New Guinea.

That knocks a hole in the Taiwan-origins theory, the scientists claim in last week's Proceedings of the National Academy of Sciences. The evidence is suggestive, says population geneticist Martin Haase of the National Museum of Natural History in Paris, France. But he says more is needed to derail the popular Taiwan hypothesis which is backed by linguistic evidence.



Pacific rats carved on head of ancestral voyager.

Stem Cells and Slavery

President George W. Bush's pick to replace outspoken biologist Elizabeth Blackburn on his bioethics commission is a stem-cell hardliner, as she made clear in a speech last week at the American Enterprise Institute, a conservative think tank in Washington, D.C.

Diana Schaub, associate professor of political science at Loyola College in Baltimore, Maryland, spoke on "bioethics and the Constitution." She identified several sections that might be relevant to bioethics, including the "pursuit of happiness" in the Preamble and the antislavery section. Tinkering with the human genome, she worried, "might transform what it means to be human for the next generation. ... (T)o secure the blessings of liberty, maybe we must secure ourselves against the abuses of liberty."



Diana Schaub

When it comes to research with human embryonic stem cells, Schaub favors more controls than even President Bush. "Every embryo for research is someone's blood relative," she noted. Raising the specter of the farming and harvesting of embryos, she suggested that "Today we are forced to wonder whether mastery and slavery might assume new forms."

When asked by an audience member about Nancy Reagan's public calls for relaxing controls on stem cell research, Schaub stuck by her guns, saying, "I would not be prepared to restore the intellectual functioning of a 93-year-old man by sacrificing embryonic life."

Schaub is one of three new council members—along with another political scientist, Peter Lawler of Berry College in Mount Berry, Georgia, and another Baltimorean, pediatric brain surgeon Benjamin Carson of Johns Hopkins University.

Exploration Exposed

One of the world's largest repositories of artifacts, maps, photos and documents charting 500 years of geographical exploration became available to the British public on 8 June.

Previously, the collections—including Dr. Livingstone's watercolors of Victoria Falls in Africa, journals from the first successful ascent of Everest, the first photographs to come out of Africa and the Middle East (see photo) and a chemistry set used by Captain Scott in the Antarctic—had only been accessible to academic fellows of London's Royal Geographical Society (RGS).

Now with U.K. Lottery funding to the tune of \$13 million, the 174-year-old society has created a new study centre and gallery where the general

public can request first-hand looks at any of two million items.

Some objects are already being "re-interpreted for contemporary research," says Steve Brace, RGS head of collections. Such as Scott and Ernest Shackleton's diary

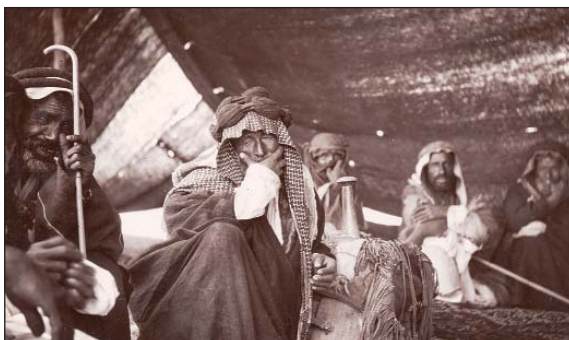


Photo of Tent of Fahad Bey in Iraq, taken by early 20th century adventurer Gertrude Bell.

notes on blue whale sightings in the Antarctic, which may be used to estimate their historic numbers.

Edited by Yudhijit Bhattacharjee

A Brash New Campus Voice

Where can you learn how to ward off the advances of an infatuated undergrad and what bacteria lurk in local pubs? In *The Peer Review*, a new magazine for Canada's 100,000 graduate students.

The quarterly magazine (thepeerreview.sa.utoronto.ca/thepeerreview.pdf) was created by Jeremy Nelson, a 26-year-old master's degree candidate in history at the University of Toronto (U of T), who seeded the venture with his life savings of \$4300 and collected \$68,000 more from donations and the government. "I wanted to showcase some of the really fascinating work that grad students are doing that is now largely being ignored," he says.

In addition to its thoughtful content, the first issue contains tips on "how to doctor your cv" along with information on products like a jet-powered beer cooler. One of the most popular features, entitled, "And you thought your work was obscure?" asks readers to pick which two of 10 equally improbable sounding titles are false journal articles.

Canadian Nobelist John Polanyi has praised the magazine, and the 12,000-strong U of T Graduate Students Association recently voted to buy a bulk subscription at \$5 per individual. (The regular rate is \$11.95.) Nelson is hoping that other institutions will follow suit.



JOBS

Seeking fresh air. Former astronaut and NASA administrator Richard Truly is retiring after more than 7 years as the head of the Department of Energy's National Renewable Energy Laboratory (NREL) in

Golden, Colorado.

Prior to joining NREL, Truly flew two shuttle missions and in 1986 led the investigation into the explosion of the space shuttle Challenger. He later spearheaded the effort to win White House and congressional approval for a replacement

shuttle, Endeavor, and went on to head NASA from 1989 to 1992. Under his tenure, NREL's budget grew from \$158 million in fiscal year 1997 to \$230 million last year.



Truly, 66, says he plans to retire to spend more time with his family. "I'm going to take some time off and go climb a real mountain, not a bureaucratic mountain," he says.

cell biologist at St. Jude Children's Research Hospital in Memphis, Tennessee, the Mott Prize for research on the cause or prevention.

NEW VENTURES

Breast cancer center. Two years after a messy split with the California-based biotechnology giant Amgen, the University of Toronto's network of research and teaching hospitals has announced plans to create Canada's first research institute strictly devoted to finding a cure for breast cancer. It will be headed by molecular geneticist Tak Mak, who once led the Amgen Institute, and seeded with funds generated from the Amgen settlement (*Science*, 21 June 2002, p. 2123).

Mak is halfway toward his 5-year goal of raising \$92 million for the Institute for Breast Cancer Research at Prince Margaret Hospital, which hopes to soon break ground on a 3250-square-meter laboratory. "Its heterogeneity makes it more of a challenge than other cancers in terms of finding targeted drugs. It's crying for more understanding," says Mak, whose first wife died of breast cancer.

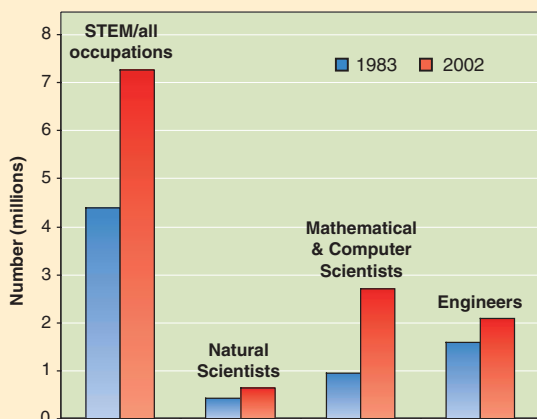
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DATAPOINT

Jobs, jobs. Although it may not have seemed that way to job seekers, the past 2 decades have been a good time to find work in U.S. science, engineering, and technical occupations. The Commission on Professionals in Science and Technology (CPST) reported this month that overall U.S. employment rose by 65%, led by a boom in the information technology sector.

Jobs in the biological and life sciences grew from 81,000 to 149,000, reflecting the significant boost in federal funding for the life sciences. In contrast, the number of jobs for physicists and astronomers was nearly flat—rising from 38,000 to only 42,000 over the period.

The report is based on data collected by the U.S. Bureau of Labor Statistics through its monthly Current Population Survey.



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