Peregrines Ready for Takeoff

Conservation biologists are giving a high-tech twist to the decades-old effort to restore speedy peregrine falcons to the wild. Researchers will soon equip about 19 newly fledged falcons—hatched from 17 nesting pairs in Maryland and Virginia—with state-of-the-art solar transmitters, costing $5000 apiece, in what organizers call the largest, longest term bird satellite tracking project in North America. The 3-year study is run by a public-private partnership that includes Dominion energy company, which has been hacking (raising) falcons on the roof of its corporate headquarters in Richmond. Schoolchildren will be able to watch juveniles hatch and monitor their movements from Dominion's Web site (www.dom.com/about/environment/falcon).

This summer's falconwear.

The T-Shirt Test Tells

Contrary to conventional wisdom, a man may be able to tell when his mate is ovulating, according to a new study that employed the lowly T-shirt as a data collection device.

Devendra Singh and P. Matthew Bronstad of the University of Texas, Austin, got 18 female college students to sleep alone in clean T-shirts for several days during their ovulatory phase and again for several postovulatory days. The shirts were then sealed in plastic bags and frozen. For the test, the garments were thawed, and 52 young males were brought in to smell the 18 pairs of shirts. In 75% of the cases, males preferred the odor of a shirt worn during the follicular (ovulatory) phase.

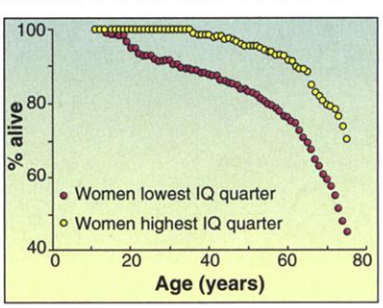
The findings "raise serious doubts about conventional scientific wisdom that human female ovulation is concealed," the authors write in a paper appearing in the 22 April *Proceedings of the Royal Society of London*. But it's a subtle thing. Another T-shirt study, conducted earlier by Steven Gangestad and Randy Thornhill of the University of New Mexico, Albuquerque, found no effect when comparing smells of ovulating and nonovulating women (as opposed to comparing two odors from the same woman). Gangestad says, however, that his most recent (unpublished) research suggests that although olfactory cues may not help men assess the fertility of strangers, "pair-bonded men may be able to detect their partner's status" and respond by being "more vigilant of their whereabouts or more attentive to them when they are near ovulation."

Bright Bulbs Shine Longer

Having a high IQ may help you live longer, according to a study of elderly Scots. Researchers traced more than 2200 people who took the same mental test in 1932 and found that those who scored highest were significantly more likely to be alive in 1997.

The finding is based on a recently uncovered trove of raw data. On 1 June 1932, every 11-year-old schoolchild in Scotland sat down for the Scottish Mental Survey. The results were stashed in government archives for decades, to be excavated in 1997 by psychologist Ian J. Deary of the University of Edinburgh and colleagues, who saw in them an unparalleled opportunity to track cognitive changes with age. Last year the scientists reported that they gave the same test to 101 of the subjects exactly 66 years later, resulting in a striking demonstration of the stability of IQ throughout life. They have also found that high scorers in 1932 today have better health and less dementia.

In the longevity study, published in the 7 April issue of the *British Medical Journal*, Deary and Lawrence J. Whalley of the University of Aberdeen were able to track the fates of about 80% of the 2792 Aberdeen test-takers. The IQ-longevity correlation was modest in men because of wartime mortality, but in women, it was substantial. For example, a girl with a childhood IQ of 115 had twice the likelihood of being alive at 77 than one with an 85 IQ. The relation persisted independent of social background. The researchers say the connection could be the result of high-IQ people having better jobs and access to health care, or avoiding bad behaviors such as smoking. The findings are not surprising, says psychologist Nathan Brody of Wesleyan University in Middletown, Connecticut, but this adds "a good deal more certainty." It's "a very exciting database that encompasses virtually the entire adult life-span."



Viral Link to Schizophrenia?

Scientists say they have the first hard evidence for the controversial idea that infectious agents may contribute to schizophrenia. The disease, which affects about 1% of the population, has a strong genetic component. But research has also revealed that some early-life events such as maternal malnutrition, perinatal infections, and birth in winter or spring are risk factors. Virologist Robert Yolken of Johns Hopkins University School of Medicine in Baltimore and psychiatrist E. Fuller Torrey of the National Alliance for the Mentally Ill Research Institute in Bethesda, Maryland, have long argued that some of these events may activate dormant viruses—evolutionary leftovers in all humans' genomes—and lead to schizophrenia.

Yolken and Torrey, with colleagues at the University of Heidelberg in Germany, tested the idea by looking for RNA from such viruses, called human endogenous retroviruses (HERVs), in the cerebrospinal fluid of 55 schizophrenics and several control groups. Of 35 individuals with recent-onset schizophrenia, 10 had signs of a virus known as the HERV-W group, compared with none of the controls, the team reports in the 10 April issue of the *Proceedings of the National Academy of Sciences*. Only 1 of 20 chronic schizophrenics was infected, leading the scientists to speculate that the virus's main role is in the onset of the disease.

So far, the evidence is "only modest," says psychologist Irving Gottesman of the University of Virginia, Charlottesville. And if schizophrenia is really caused by a dormant virus that "wakes up," he says, there's still the question of "what triggers the trigger?"

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