

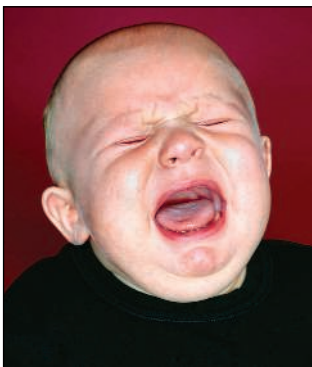
Crying a Bad Omen?

It's a nightmare for the exhausted new mother—a constantly squalling infant. And if the baby can't calm down after a few months, it's a bad sign: A new study suggests that prolonged crying may be a sign of future behavioral problems.

When newborns cry inexplicably for hours every day, it's called colic. But colic rarely persists beyond 3 months and is not associated with later ill effects. More persistent crying, however, may signal flawed neurological development, according to a paper in the November *Archives of Disease in Childhood*.

Researchers at the National Institute of Child Health and Human Development in Bethesda, Maryland, analyzed data from a study of normal full-term infants born in Norway and Sweden in the late 1980s. The babies were evaluated periodically in the first 13 months of life. About 5 years later, 327 children—or 80% of the original sample—were given tests probing their health, IQs, motor abilities, and personality characteristics. Of these, 63 were colicky, and 15 continued to be prolonged criers.

The colicky infants showed no decrements on the later tests, but the criers' average IQ was 9 points below that of the other children. The criers also had poorer hand-eye coordination and were more likely to be hyperactive or present discipline problems.



Although the sample is small, the authors say they were able to rule out confounding factors including health problems, maternal IQ, and socioeconomic status. "It is likely that the prolonged crying behavior is indeed a reliable predictor" of impaired cognitive development, says lead author Malla Rao of the National Institute of Allergy and Infectious Diseases. The crying may stem from "irritability caused by subtle underlying neurological problems," the authors speculate.

Dieter Wolke, a psychologist at The Jacobs Foundation in Zurich, Switzerland, says the study is congruent with his research showing that criers are more likely to be hyperactive. The research has "important implications," he says, because problems are usually not diagnosed until children enter school.

ID Forever

"Intelligent design" (ID)—the thinking man's creationism—keeps popping up like mushrooms after a summer rain. Last month it cropped up in Pennsylvania, where the Dover Area School Board revised its precollege science curriculum to include discussion of "gaps/problems" in Darwinian theory and of "other theories of evolution including ... intelligent design."



Good as New

Lasers are turning out to be handy tools for restoration. Last year a new high-precision beam was used to clean Verrocchio's statue of David in Florence. Now Italian archaeologists have used a new underwater laser technique to restore some 3500 Roman coins found accreted together in a block off the coast of Italy 2 years ago. The water prevents the laser from melting the coins, and the laser's heat produces bubbles that act as "micro-hammers" that knock off gunk.

"This is the first instance that we know of that a school district has stated in black and white that it expects ID to be taught," says Eugenie Scott of the National Center for Science Education in Oakland, California. Both parents and teachers reportedly resisted the move, which was pushed through by board member William Buckingham, head of the curriculum committee. He complained that a biology text adopted by the board was "laced with Darwinism." Even the Discovery Institute in Seattle, Washington, promulgator of ID, has expressed discomfort with the move, which observers think is an open invitation to a lawsuit.



Stairway to the Past

Archaeologists have uncovered Europe's oldest wooden staircase in an ancient salt mine in Austria. The discovery of the 3000-year-old stairs in Hallstatt, southeast of Salzburg, "was an absolute surprise," says Hans Reschreiter of the Natural History Museum in Vienna, who is leading excavations at the site. "We had seen the wood before from below but couldn't tell what it was," he says. The stairs were apparently built around 1300 B.C.E. from wood harvested the same year. Because of salt's ability to preserve biological tissue, the unadorned, "very exact and solidly built" structure is "like fresh wood," he adds.

The ancient mine has yielded a number of other treasures as well, including leather, bones, food scraps, and even human excrement. Bronze Age mine workers apparently used the floor as a trash heap, says Reschreiter, and "everything that the people threw away 3000 years ago is exactly how they left it."

Edited by Yudhijit Bhattacharjee

JOBS

New NIEHS chief. A lung disease specialist has been named the next director of the National Institute of Environmental Health Sciences (NIEHS) in Research Triangle Park, North Carolina. David Schwartz, head of the pulmonary



division at nearby Duke University, will take over the \$711 million institute—one of 20 under the National Institutes of Health—in April 2005.

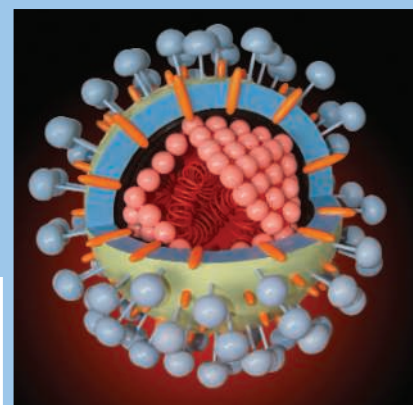
He succeeds cell biologist Kenneth Olden, who is returning to the lab after 14 years at the helm (*Science*, 8 August 2003, p. 761).

Schwartz, 51, says he plans to broaden NIEHS's focus to include the study of ailments such as Alzheimer's, infectious diseases, and bronchitis. He also intends to build on the institute's efforts to understand how environmental exposures interact with genetics, nutrition, aging, and other variables to trigger disease.

Michael Gallo, a toxicologist at Rutgers University in New

TWO CULTURES

Viral replication. This wooden model of the SARS virus was created by artist Tom Brooke in collaboration with British virologist John Oxford. A photograph of the model was among 65 images, animations, and short films on the life sciences and biotechnology that were exhibited at the BioPicture Festival in Marseille, France, last week (www.biopicture.com).



Brunswick, New Jersey, says it's notable that NIEHS has chosen a director whose background is in diseases other than cancer, which has been a longtime emphasis for the institute.

PIONEERS

Cracking the code. Working at Bell Labs, computer scientist Lucinda Sanders noted that software development teams comprising both genders tended to be more innovative than those made up entirely of men. But there weren't enough women to go around. Later, as an administrator at the University of Colorado, Boulder, she found out why: "Our computer science classes had only 10% women, less than when I was in school."

Sanders now has a chance to improve that statistic around the country, thanks to a 4-year, \$3.25 million grant from the National Science Foundation to set up a center

to increase female participation in information technology (IT) careers. The National Center for Women and Information Technology will bring together a network of universities, nonprofits, and industry leaders to develop and implement programs aimed at closing the gender gap in IT within the next 20 years.

"I'm not arguing for pink laptops, but I do believe men and women bring different perspectives to the design process," says Sanders, who is



the center's co-founder and executive director. "Without both genders involved, products won't be as valuable or generally applicable to our society."

AWARDS

Virology prize. British plant pathologist David Baulcombe of the Sainsbury Laboratory in Norwich, U.K., has won the \$43,000 triennial M. W. Beijerinck Virology Prize from the Royal Netherlands Academy of Arts and Sciences. His work examines how plants use RNA silencing against viruses.

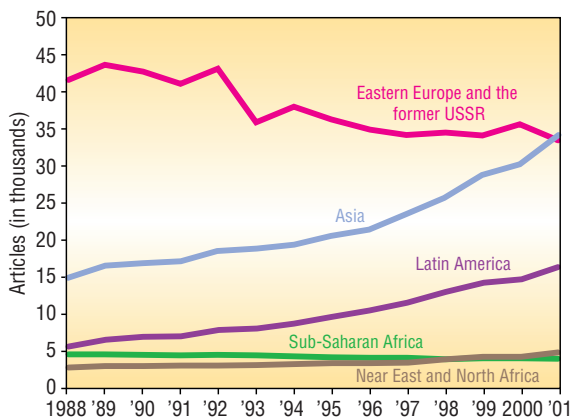
Mental health award. University of Pennsylvania psychiatrist Albert Stunkard has been awarded the \$20,000 Sarnat International Prize in Mental Health by the National Academies' Institute of Medicine. Stunkard receives the honor for his research on eating disorders.

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DATA POINT

The push to publish. Latin American scientists are coming on strong in a race with their colleagues in the developing world. A new analysis (Info Brief, 04-336) by the National Science Foundation (NSF) of articles published between 1988 and 2001 shows a 200% rise in the number from that region. That outpaces a 135% jump in Asia and a 90% increase for scientists in the Near East and north Africa. Eastern Europe and sub-Saharan Africa registered small declines.

Brazilian scientists showed the biggest productivity gains, with a quadrupling of output that is equal to the total of the next three countries: Argentina, Chile, and Mexico. And collaboration rates are booming. Some 43% of the papers from Latin America have international authors, a leap from 29% in 1988. However, Brazilian scientists are much more likely than their regional neighbors to team up with scientists from industrialized nations, a pattern that NSF's Derek Hill notes is also true for the scientific giants of Asia and Africa.



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