

Genetic Diversity Survey

Elizabeth Pennisi, in her News & Comment article about a new National Research Council (NRC) report "Evaluating human genetic diversity" (24 Oct. p. 568), states that the committee (which I chaired) that wrote the report gave "a cautious nod of approval" to a proposed global survey of human genetic diversity. The committee strongly endorses such a survey, provided that it is conducted in a way that protects the individual identities and rights of the participants. However, contrary to what the article says, the committee neither approved nor disapproved of the so-called "consensus document" that has been identified as the Human Genome Diversity Project, although we have taken issue with some of the recommendations in the consensus statement. As stated in the executive summary of our report, after an exhaustive examination, the committee found that this document does not clearly explain the purpose of the project or provide the necessary safeguards for protecting participants. Accordingly, the committee focused its attention on the scientific merits of a global study of human genetic variation and the ethical, legal, and organizational difficulties such a study would have to confront.

William J. Schull
Committee on Human Genome Diversity,
Board on Biology,
Commission on Life Sciences,
National Research Council,
Washington, DC 20418, USA

SIV Vaccine for AIDS

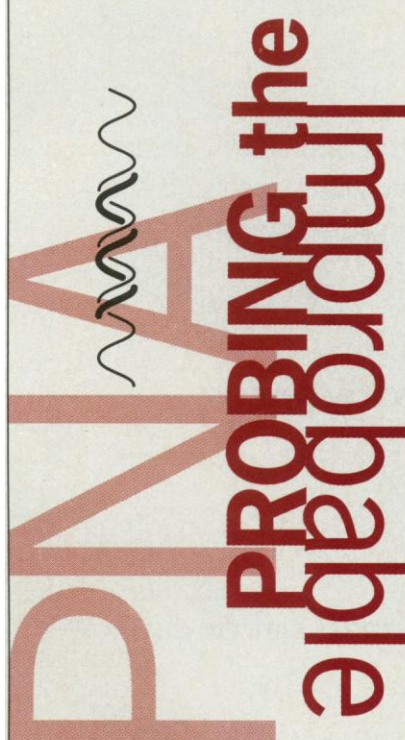
Jon Cohen, in his News article "Weakened SIV [simian immunodeficiency virus] vaccine still kills" (3 Oct., p. 24), cites several researchers' data that a percentage (<5%) of monkeys in different clinical trials have developed immunodeficiency or AIDS, or both, after infection with human immunodeficiency virus (HIV). He also quotes the criticisms of several researchers about the publicity surrounding the International Association of Physicians in AIDS Care (IAPAC) initiative to recruit physician volunteers for a safety trial with live attenuated HIV.


Not quoted are observations from Australia (1) and from Massachusetts (2) of 19 humans who were accidentally infected with HIV deficient only in the *nef* gene 10 to 14 years ago. None of these individuals has suffered immunosuppression that is ob-

viously the result of infection with the attenuated HIV. Seven patients are still alive—all with normal immune function. Four have an undetectable HIV viral load, and three have detectable viral loads—all less than 3000 copies per milliliter. Three patients have died from probably unrelated causes. Two patients died in their 80's, one of disseminated colon cancer and one of cerebrovascular disease, and neither showed signs of immunosuppression resulting from infection with the attenuated HIV, despite their advanced years. The third patient who died had systemic lupus erythematosus and was on immunosuppressive therapy for this when she died of *Pneumocystis carinii* pneumonia—a recognized complication of immunosuppressive therapy.

This experience with a *nef*-deleted HIV in humans is surely more relevant in deciding whether a trial in humans is likely to be safe than consideration of SIV delta *nef* or SIV delta 3 infection in monkeys—a different virus in a different host.

Charles F. Farthing
Chair, Live-Attenuated HIV
Vaccine Subcommittee, IAPAC,
Medical Director, AIDS Healthcare
Foundation, and Department of Medicine,
University of California Medical School,
Los Angeles, CA 90095, USA



PNA	W	M	W	M
DNA	N	N	C	C
Excess PNA -				
197 bp -				


Analysis of W1282X mutation using slab gel format. PCR DNA samples (25 ng) of either wild-type homozygous (N/N) or carrier heterozygous (X/N) were denatured and hybridized with 0.5 pmol of fluorescein labeled wild-type PNA (WT), or mutant PNA (M). Both PNA probes were 15-mers; the PNAs were detected using antiluorescein antibody conjugated to alkaline phosphatase. Perry O'Keefe et al. PNA PreGel Hybridization, an Alternative to Southern Blotting. Proceedings of the National Academy of Sciences, USA. (1996), 93, 14670-14675. Reproduced with permission.

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John L. Sullivan
University of Massachusetts Medical
Center, Worcester, MA 01605, USA

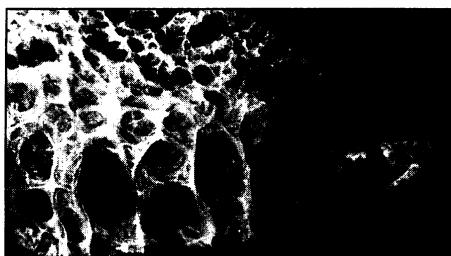
References

1. N. J. Deacon *et al.*, *Science* **270**, 988 (1995).
2. F. Kirchhoff, T. C. Greenough, M. Hamacher, J. L. Sullivan, R.C. Desrosiers, *Virology* **232**, 319 (1997).



Chick Heart, Not Lizard Lung

In our report "Lung structure and function in theropod dinosaurs and early birds" (14 Nov., p. 1267), we inadvertently substituted an incorrect photo in place of an illustration that should have appeared as figure 1D. Here

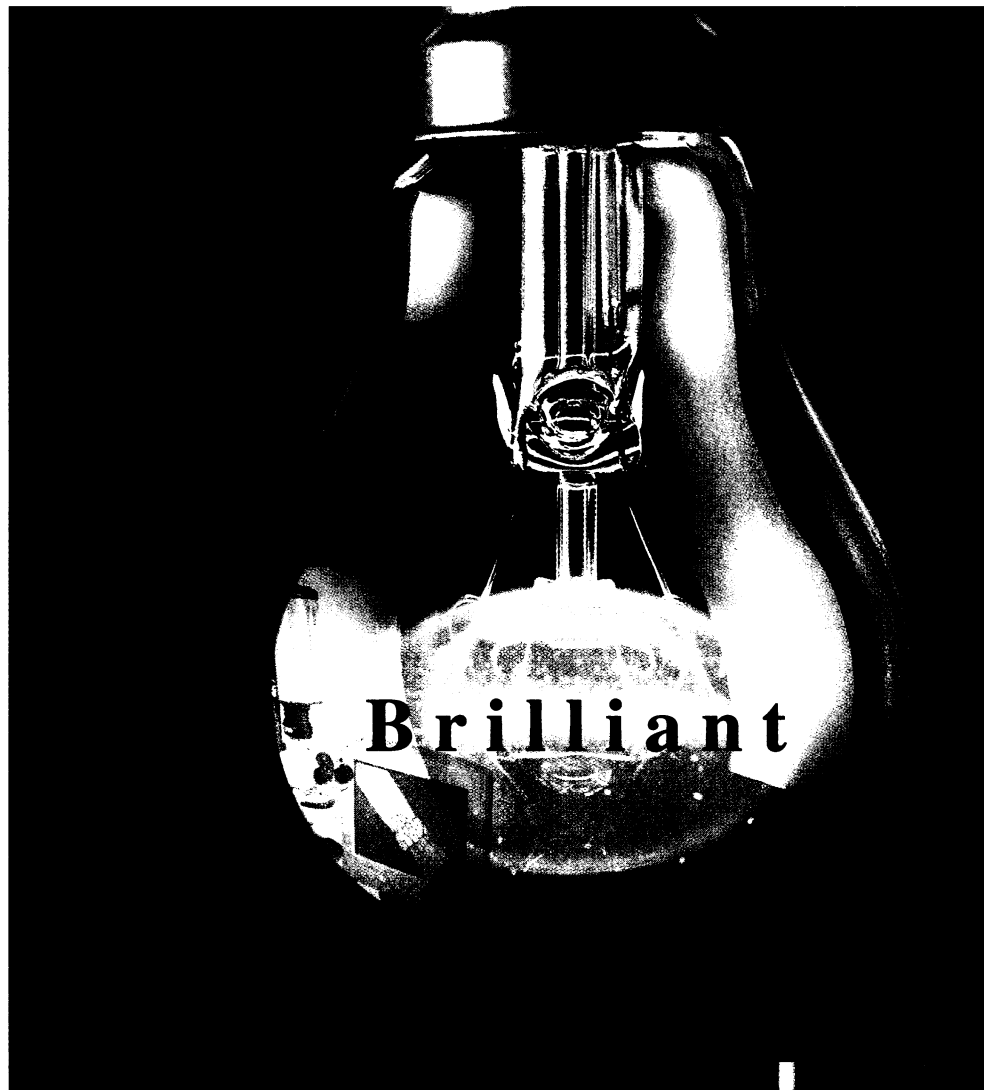


we present the correct figure (below, 1×), which illustrates the relatively large, non-vascularized volume of the reptilian lung (the lizard *Varanus*) that is devoted to convective ventilation, rather than to respiratory gas exchange. The picture in the report was actually of the heart of a 5-day-old chick embryo (figure 12 from L. H. S. Van Mierop and L. M. Kutsche, in *Congenital Heart Disease: Causes and Processes*, J. Nora and A. Takao, Eds. (Futura, New York, 1984), pp. 459-479]. This error has no bearing on the substance or the conclusions of our report. Nevertheless, we regret any confusion or inconvenience to readers.

John A. Ruben, Terry D. Jones, Nicholas R. Geist, *Department of Zoology, Oregon State University, Corvallis, OR 97331-2914, USA*; W. Jaap Hillenius, *Department of Biology, College of Charleston, Charleston, SC 29424, USA*

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