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LETTERS

Tree-Ring Research

Regarding a photograph by one of us (B.M.B.) that appeared with the article "There's a new offering on campus: Global change 101" by Ann Gibbons (Research News, 22 May, p. 1146), I would like to clarify a few points. First, the photograph shows Mike Peterson of the Tasmania Forestry Commission and Mike Barbetti of the University of Sydney working near the summit of Mount Read, in a group of trees killed by fire in 1961. Neither Peterson nor Barbetti is a Lamont-Doherty researcher, as stated in the caption; both were assisting on an ongoing project directed by Ed Cook, a research scientist at Lamont-Doherty. We cut and sectioned this standing, dead tree for our study; but the rest of our samples were taken with the use of increment corers, which remove only a 4-millimeter dowel of wood from the tree and cause no discernible harm to living trees. We do not usually cut trees, and when we do only dead trees are cut. Additional samples taken at this site included buried and partially buried, nonliving stems and eroded stumps from within the fire-killed site only, and not from the adjacent, living site. We make every effort to have minimal impact in the areas in which we work, while at the same time getting the best samples for our research interests.

Brendan M. Buckley
Edward R. Cook
Gordon C. Jacoby
Tree-Ring Laboratory, Lamont-Doherty Geological Observatory of Columbia University, Palisades, NY 10964

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Evolution of HIV in Africa

Steve Sternberg's Research News article of 15 May (p. 966) describes a phylogenetic analysis which concludes that West Central Africa may contain a lineage of HIV-1 (human immunodeficiency virus–1) that is ancestral to the other HIV-1 isolates analyzed to date. This conclusion has been criticized on the basis of the relatively low prevalence of HIV-1 in that region of Africa, but this low prevalence is entirely consistent with the patterns expected from current evolutionary considerations of HIV virulence (*1*). These evolutionary considerations suggest that the pandemic HIV evolved to a high level of virulence in mid-Central and East Africa in response to an increase in multiple-partner sexual contact brought about by the socioeconomic crisis that occurred there during the 1970s. The lower rates of sexual contact along the west coast of Africa should have favored the evolution of lower virulence. Accordingly, current evidence indicates that the HIV-2 in West Africa has a lower virulence and lower prevalences than the pandemic HIV-1 (*1–3*). The limited comparisons to date also suggest that these low prevalences of HIV-2 are remaining fairly stable in areas of West Africa where HIV-2 predominates (*4*). According to this evolutionary argument, the same should be true of HIV-1 strains that have evolved endemically in areas with relatively low rates of multiple-partner sexual contact. That is, we can expect such strains of HIV-1 in western regions to have a lower, more stable prevalence than the HIV-1 strains in mid-Central and East Africa.

This evolutionary argument can be tested by assessing the virulence of the root West African HIV-1 lineages in humans by quantifying, for example, the time between the onset of infection and the onset of AIDS. The evolutionary theory predicts that the virulence and replication rates of these lineages should be lower than those of the lineages in mid-Central and East Africa. Seropositivity should also increase more gradually with age, more like the age structure of HIV-2 infections than pandemic HIV-1 infections (*2, 3*).

Paul W. Ewald
Department of Biology, Amherst College, Amherst, MA 01002–2237

REFERENCES

1. P. W. Ewald, *Hum. Nat.* 2, 1 (1991).
2. P. J. Kanki, R. G. Marlink, T. Siby, M. Essex, S. M'Boup, in *Advances in Applied Biotechnology Series*, vol. 7, *Gene Regulation and AIDS: Transcriptional Activation, Retroviruses, and Pathogenesis*, T. S. Papas, Ed. (Gulf, Houston, TX, 1990), pp. 255–272.
3. I. Romieu, R. Marlink, P. Kanki, S. M'Boup, M. Essex, *J. Acquired Immune Defic. Syndrome* **3**, 220 (1990).
4. A. Del Mistro *et al.*, *ibid.* 5, 19 (1991).

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Bevalac Funding

More is at stake in the imminent closure of Berkeley's Bevalac than David P. Hamilton suggests in his article "NASA researchers