

analyses have also included more than 30 putative ancient South American specimens, some of them showing a high degree of fossilization. Different multivariate statistic tools have been used in these studies with complete convergent results.

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We Aren't Worth a Mention?

Floyd E. Bloom's "Endless pathways of discovery" seems remarkably constrained to eliminate discovery of much of human behavior, social organization, and many features of what constitutes being human (Editorial, *Science's* Compass, 14 Jan., p. 229). The nature that, in Stephen Jay Gould's introductory essay to the series (p. 253), an advancing but very human science seeks to understand seems peculiarly devoid of human beings beyond the molecular or cellular, as the iconographic borders indicate. Bloom says that "the editors retain credit for any errors, omissions, or overemphases," or perhaps discredit for a timeline devoid of Adam Smith, Thomas Malthus, Karl Marx, George Perkins Marsh, Sigmund Freud, Max Weber, Franz Boas, John Maynard Keynes, Noam Chomsky, and Ester Boserup, to name a few.

In Gould's essay, where he tries to disperse the "false dichotomies of the science wars," he observes that "science, as a quintessentially human activity, must reflect a surrounding social context...." It is difficult to understand the social context that encourages pathways of discovery that lead everywhere but to ourselves.

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Economics of Bushmeat

There is growing evidence that commercial hunting of wildlife for sale as food is a more immediate threat to wildlife conservation and species survival than is habitat destruction throughout most of the tropical forested regions of the world, a topic discussed in the Policy Forum "Wildlife harvest in logged tropical forests" by John G. Robinson, Kent H. Redford, and Elizabeth

L. Bennett (*Science's* Compass, 23 April 1999, p. 595) and elsewhere (1, 2). Attempts to reduce or halt overexploitation of wildlife have focused on the supply side of the commercial bushmeat trade. Most interventions emphasize law enforcement to curb hunting and transporting of meat to markets, particularly within the context of commercial logging that greatly facilitates the bushmeat trade (see Robinson, Redford, and Bennett's Policy Forum).

We know little about how consumer demand for bushmeat responds to the price of bushmeat and of its substitutes, or to changes in household income. If the quantity of bushmeat demanded by consumers does not respond to large changes in the price of bushmeat, then present command-and-control measures to constrain the supply of bushmeat, or efforts to increase production of livestock alternatives to bushmeat, at best will have a modest effect on wildlife conservation. If the consumption of game, like the consumption of firewood or charcoal, declines when incomes grow, then economic prosperity could enhance wildlife conservation.

Preliminary evidence from household surveys in Bolivia and Honduras suggests that bushmeat consumption follows an inverted U pattern with income, increasing as income rises from a low initial base, but then



Iguanas are common bushmeat fare in Honduras.

declining. Consumption also declines strongly when the price of bushmeat increases and that of bushmeat substitutes falls.

At least three specific lessons for policy-makers and donors could be gleaned from these results. First, economic development might result in enhanced wildlife conservation if household incomes rise fast enough and high enough to shift bushmeat from a necessity to an inferior good. Second, given the high own-price elasticity of demand (the change in demand for an item as the price of that item changes) for bushmeat, any factor that lowers the cost of hunting (for example, new weapons or cheaper market access) will increase hunting effort and thus the impact on wildlife. But any activity that raises the opportunity costs of labour could counterbalance the negative affects of new technologies. Last,

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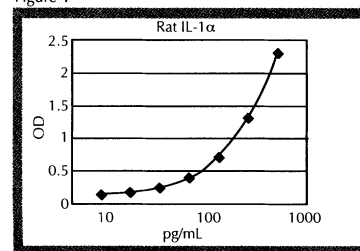
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Figure 1



Show Me! Figure 1 - Rat IL-1α standard curve. The Cytoscreen™ kit specifications: sensitivity <2.5 pg/mL, range= 7.8 - 500 pg/mL.

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the data suggest that demand for bushmeat may be reduced and wildlife conservation enhanced by promoting access to cheaper alternative sources of animal protein.

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Retraction

In "Spectroscopic detection of molecular hydrogen frozen in interstellar ices" published by *Science* 15 October 1993 (Reports, p. 400), we reported the detection of solid molecular hydrogen (H_2) in the interstellar medium of the ρ Ophiuchus dark cloud. Our report was based on our measurement of a broad absorption feature centered at 2.42 micrometers toward the obscured infrared source WL5; we attributed the feature to a combination of solid methanol (CH_3OH) and solid H_2 . Recently, we obtained a lower resolution spectrum of WL5, which included the same spectral region as our 1993 spectrum but covered a broader range of

wavelengths. In it are a number of bands of carbon monoxide (CO), which probably arise in the photosphere of WL5 or possibly in a hot and dense circumstellar disk. It is clear that the spectral feature which we attributed to solid hydrogen and methanol corresponds to the 6-4 band of CO, because both the 5-3 and 7-5 bands of CO, which lie adjacent to the 6-4 band, are present at comparable strengths. Although this does not preclude the presence of frozen H_2 , most or all of the absorption we reported is due to CO and thus we retract our claimed detection of solid H_2 and solid CH_3OH . We thank J. P. Emerson and T. C. Teixeira for calling this possibility to our attention.

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CORRECTIONS AND CLARIFICATIONS

The following are corrections for the "Paths of Discovery" timeline (14 Jan., p. 230). In a 1543 entry, the book title should have read *De Humani Corporis Fabrica*; 1610 entry, the word "*Siderus*" in the book title should have read "*Siderius*"; 1629 entry, the

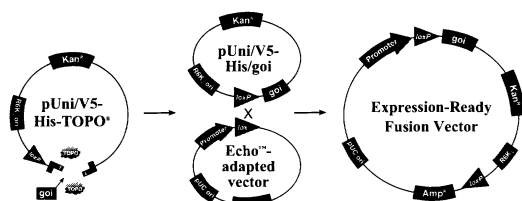
word "*Cortus*" in the book title should have read "*Cordis*"; 1637 entry, the word "*Methode*" in the book title should have read "*Méthode*"; 1735 entry, the word "*Natura*" in the book title should have read "*Naturae*"; the 1785 entry should have been dated 1795 and placed accordingly; the 1798 entry should have been dated 1797; the 1865 entry should have been dated 1866; and for the 1953 entry, the date should have been listed as 1960s, and Harry Hess, Dan McKenzie, Jason Morgan, and J. Tuzo Wilson should have been listed as developing the theory of tectonic plates (and arguably others), not Maurice Ewing and Bruce Heezen. In the bottom panel "All-too-human science," Aristotle had a five-element system, not four, ether being the element that was omitted.

In the Random Samples item "Plant patent killed" (26 Nov., p. 1675), withdrawal of the plant patent in question by the U.S. Patent and Trademark Office does not mean that the patent was "killed" or "nullified." The action is in the context of a reexamination request filed by a third party, and the patent owner has time to respond to the substantial new questions of patentability raised by that request. As of publication, the patent is still valid pending completion of the appeal.

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