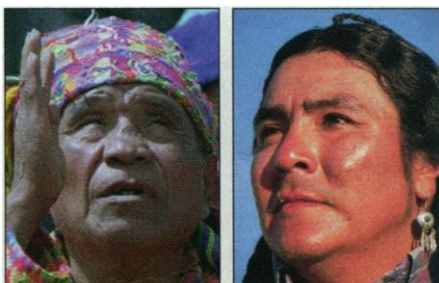




Laboratories in South America disagree over who discovered that there is a common variant in the Y chromosomes of native American men. A reader questions why an actor who played a doctor on television should testify before the U.S. Congress on behalf of medical research. "This strategy...is the logical result of attitudes displayed in an old television advertisement ('I'm not a doctor, but I play one on TV')...." Thoughts about how to encourage interdisciplinary research are offered. A reader wonders whether ancient cave painters were affected by carbon monoxide poisoning. The relationship between the genome and aging is explored. And an article about peptide bond formation is retracted.

Origin of the Amerindians

I am writing in reference to the News Focus article "Y chromosomes point to Native American Adam" by Diego Hurtado de Mendoza and Ricardo Braginski (5 Mar., p. 1439). In that article, Nestor



Men from throughout the Americas share a common Y chromosome variant.

Bianchi is credited as being one of the discoverers of the major Y chromosome founder haplotype of Amerindians. Although Bianchi did collaborate in discussions and by providing Amerindian DNA samples, and indeed was a co-author of the original publication in *Nature Genetics* (1), the experimental work that led to the discovery was performed by Fabricio Santos and me in my laboratory at the Departamento de Bioquímica e Imunologia of the Universidade Federal de Minas Gerais, in Belo Horizonte, Brazil. Two other articles with additional results from our laboratory were published in quick succession, extending the founder haplotypes to a larger number of Amazonian Amerindian populations (2) and showing that the major founder haplotype was also found in North America (3). Together, these three publications provided strong support for the notion that present-day North and South Amerindians originated from the same single migration of an ancestral Asian population in the Pleistocene. The discovery of the major founder haplotype provided us with a

molecular handle that permitted our recent identification (correctly noted in the article) of populations from Central Siberia as the most probable source of the migration from which the Amerindians originated (4).

Sergio D. J. Pena

Departamento de Bioquímica e Imunologia, Universidade Federal de Minas Gerais, Caixa Postal 486, Belo Horizonte, Brazil 30161-970. E-mail: spena@dcc.ufmg.br

References

1. S. D. J. Pena *et al.*, *Nature Genet.* **11**, 15 (1995).
2. F. R. Santos *et al.*, *Brazil. J. Genet.* **18**, 669 (1995).
3. F. R. Santos, L. Rodriguez-Delfin, S. D. J. Pena, J. Moore, K. Weiss, *Am. J. Hum. Genet.* **58**, 1369 (1996).
4. F. R. Santos *et al.*, *ibid.* **64**, 619 (1999)

Response

Pena reports a chronology of the events leading to the finding of a major founder Y haplotype in Native Americans. I agree only in part with his account, however.

At the end of 1993, Pena from Brazil, Francisco Rothhammer from Chile, and I, representing three laboratories, were jointly awarded a grant by the Fundación Antorchas and by the Centro Argentino Brasileño de Biotecnología. As is customary in scientific research, each laboratory

was assigned a role. The Chilean group and Francisco Carnese's group in Argentina, who were working with our lab, provided the biological samples, the blood group testing, and the anthropological analysis of donors. The Brazilian group conducted the molecular analysis of Y chromosomes, and my group studied the mitochondrial DNA markers. Only with the contributions of researchers from each of the four collaborating laboratories was it possible to identify the founder Y haplotype.

Our preliminary findings were eventually published in 1995 in the "Correspondence" section of *Nature Genetics*, with Pena's name listed as first author (1). The first formal paper dealing with the Amerindian Y haplotype appeared in 1997 (2). In this last publication, I was the first author and Pena, Rothhammer, Carnese, and three other researchers were co-authors.

I think credit for a scientific finding is shared by the co-authors of the paper in which the new finding or hypothesis is reported. I agree with Pena's point that the findings of the Native American Y haplotypes were not made in my laboratory. However, I disagree that the Brazilian laboratory alone should have received credit.

N. O. Bianchi

Instituto Multidisciplinario de Biología Celular, La Plata, Argentina

References

1. S. D. J. Pena *et al.*, *Nature Genet.* **11**, 15 (1995).
2. N. O. Bianchi *et al.*, *Am. J. Phys. Anthropol.* **72**, 78 (1997).

Playing Doctor?

I was appalled to read that federally elected representatives are turning to actresses and actors for advice as to how best use tax dollars in medical research ("Dr. Quinn counsels the House," *Random Samples*, 5 Mar., p. 1445). This strategy, unfortunately, is the logical result of attitudes displayed in an old television advertisement ("I'm not a doctor, but I play one on TV"), but even in this age of cynicism toward Washington I found myself taken aback by this display of lack of respect for true medical research. As a country, we recently sent John Glenn, not the actor who played his character in "The Right Stuff," back into space to study the effects of aging, and we named "Lou Gehrig's Disease" (amyotrophic lateral sclerosis) after the baseball star, not after the actors who played him in films. Why should it be any different for medical research?

Richard W. Murray

Department of Earth Sciences, Boston University, Boston MA 02215, USA. E-mail: rickm@bu.edu

NOTICE TO READERS

In the issues of 4 and 11 December 1998 and 8 and 22 January 1999, an unusual number of figures were printed incorrectly because of errors at our compositor and our printer. All the errors were corrected on *Science Online*. Because of the quantity of poorly printed figures, we are printing correct versions of those that had the most serious errors beginning on page 2102 of this issue. We apologize to our readers and to our authors for these problems. For planning purposes, we would like to hear whether you consider correction of such errors online with notification in print to be adequate. Please send your comments to science_letters@aaas.org.