



Quantitative Trait Locus for Reading Disability: Correction

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Samuel Sass discusses the origin of the legend in *Skeptical Inquirer* (2), saying that it may have started in a 1843 report to Congress by Henry L. Ellsworth, Patent Commissioner. In that report, Ellsworth commented that

The advancement of the arts, from year to year, taxes our credulity and seems to presage the arrival of that period when human improvement must end.

Sass states that Ellsworth was merely using hyperbole to illustrate the greatest number of inventions occurring and did not mean that patentable discoveries would cease anytime soon.

L. Sprague de Camp has even traced the notion that "all has been invented" back to ancient times. He quotes Sextus Julius Frontius, Roman engineer, as writing

Laying aside also all considerations of works and engines of war, the invention of which has long since reached its limit, and for the improvement of which I see no further hope in the applied arts. . . .

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References

1. C. D. MacDougall, *Hoaxes* (Dover, New York, 1958).
2. S. Sass, *Skeptical Inquirer* (Spring 1989), pp. 310-312.
3. L. S. de Camp, *ibid.* (Fall 1989), pp. 104-105.

Quantitative Trait Locus for Reading Disability: Correction

We recently reported evidence for a possible quantitative trait locus (QTL) for reading disability on chromosome 6 in two independent samples of sibling pairs (Reports, 14 Oct., p. 276) (1). In a sample of 126 sibling pairs from 19 extended families, four markers located on the short arm of chromosome 6 in bands 6p21.31-p21.1 were genotyped. Subsequently, polymerase chain reaction was used to obtain more informative DNA markers in the same region for a subset (114 pairs) of the kindred sibships and for an independent sample of 50 twin pairs, in which at least one member of each pair was reading disabled.

Results obtained from interval mapping of reading performance data by using the four original markers localized a possible QTL to the short arm of chromosome 6 ($P = 0.0027$). Results of corresponding analyses of data from sibling pairs genotyped for five DNA markers localized the quantitative trait locus (QTL) to 6p21.3 ($P = 0.0417$). Analyses of reading performance data from the independent sample of twin pairs provided evidence for linkage in the same region ($P = 0.0003$). Interval mapping analyses of reading performance data from individuals with more extreme deficits yielded somewhat

stronger evidence for linkage in the sibling pairs genotyped for the original markers ($P = 0.0003$) and the twin sample ($P = 0.0001$), but not in the sibling sample genotyped for the DNA markers ($P = 0.0667$).

Recent reanalyses of the twin data revealed that four identical twin pairs had been inadvertently included in the sample. After these twin pairs were deleted from the sample, results of interval mapping analyses of data from the fraternal twin pairs also provided evidence for a QTL in the same region. Although results obtained from the more extreme sample of fraternal twins are less significant ($P = 0.0369$), those from the unselected sample of twin pairs are significant ($P = 0.0094$). In order to confirm this evidence for a possible QTL for reading disability on chromosome 6, analyses of data from additional twin pairs will be required.

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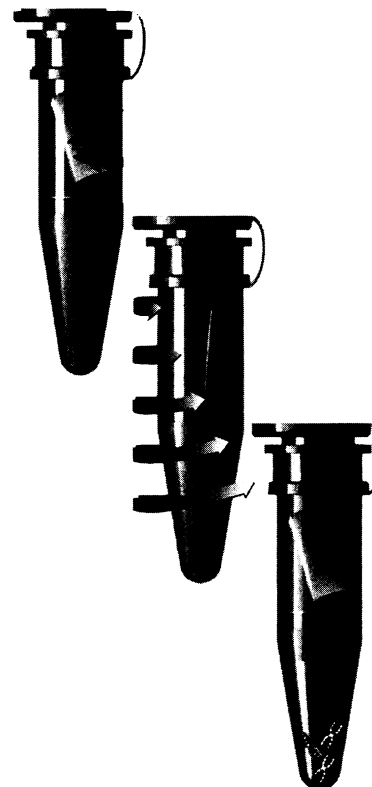
1. L. R. Cardon *et al.*, *Science* **266**, 276 (1994).

Corrections and Clarifications

In the news article "Can risky mergers save hospital-based research?" by Wade Roush (19 May, p. 968), the statement that University Hospitals of Cleveland rose from 20th in the rankings of teaching hospitals funded by the National Institutes of Health (NIH) in 1991 to 12th at present was incorrect. In fact, it was Case Western Reserve University (CWRU), with which University Hospitals of Cleveland is affiliated, that received \$69 million in NIH grants in 1993, making it the 20th largest recipient of such grants among medical centers; the university then received \$97 million in 1994, raising its rank to 12th. About \$15 million of the increase, or 53%, was attributable to CWRU's 1992 affiliation with Henry Ford Hospital in Detroit. Other hospitals affiliated with Case Western include MetroHealth Medical Center, Mount Sinai Medical Center, St. Luke's Medical Center, and Cleveland Veterans' Affairs Medical Center.

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