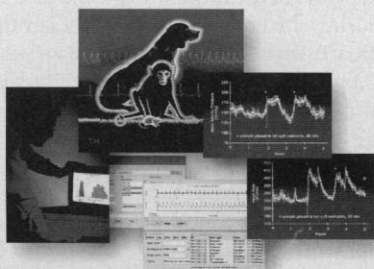


# [Better Data = Better Science]



Restraint has a profound impact, even in rats that have been extensively trained, as demonstrated by group mean BP and HR from six SHR. Rats placed in restrainers for 30 minutes at asterisk.

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with making a science career attractive, as the future of American science depends entirely on the talent of the individuals brought into science careers. The AAAS, in advocating accuracy in research articles, should start with the question of who was responsible for what in the papers published. I urge *Science* to try a year-long experiment to implement the suggestions made by Benjamin White and Jonathan Knight in their letters of 24 January (p. 461).

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## Asbestos Removal

Readers of the Random Samples item "Deasbestosization" (13 Dec., p. 1845) about asbestos removal in Europe might be interested to know the following.

- Hundreds of buildings have already been decontaminated in England, Germany, and Switzerland, for example.
- A thorough investigation was carried out on the buildings of the Jussieu campus of Paris University by the Bureau de Recherches Géologiques et Minières (France), Fibrecount (Belgium), and Eurotec (Germany). They estimated that in most of the buildings risk exposure to asbestos was high, and they recommended a "global, rapid, and massive operation of removal of asbestos in the whole building"; they also proposed a plan of decontamination. The only major problem was the cost of the operation, and this has been settled by the French Ministry of Education and Research.
- The medical health expert quoted in the piece as opposing asbestos removal at the Jussieu campus is Étienne Fournier, a toxicologist well known in France because of his involvement with the asbestos industry.
- The National Institute for Health and Medical Research (INSERM) estimates the incidence of asbestos-related cancer to be more than 2000 workers per year in France, but less than 80 workers (or their families after their death) receive any compensation.

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Whatever the merits of the argument that "health risks from undisturbed asbestos are exaggerated," it is absurdly irrelevant to the situation at Jussieu. Asbestos dust has been filtering through the holes in ceiling

panels since the building was completed in the late 1960s. A room-by-room analysis conducted last year found dangerous amounts of asbestos throughout the campus. Specialists who measured campus contamination during maintenance activities actually repeated their measurements, assuming that the high measurements were a result of instrument malfunction. My own office was one of many found to present an urgent health problem, requiring immediate attention. Fournier's report, the scientific source mentioned in your article as opposing the removal, was published well after measurements of contamination at Jussieu were made public last November.

As of this writing, 27 Jussieu employees have been diagnosed with asbestos-related illness, and four have died.

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## Recombinant DNA Technique and Sickle Cell Anemia Research

The data presented in the report by Allyson Cole-Strauss *et al.* (6 Sept., p. 1386) infer a remarkable phenomenon: 50 to 80% of mutant,  $\beta^S$ -globin loci in a population of B cells were converted to wild-type alleles after exposure of those cells to oligonucleotides containing wild-type,  $\beta^A$ , sequences. This represents an absolute recombination frequency (recombinant cells/exposed cells) that is three to six orders of magnitude higher than that normally seen in cultured mammalian cells (1).

These data were published without the clonal isolation of a single recombinant cell line. Gene conversion was assayed on pooled-cell extracts containing a mixture of reagent oligonucleotides and chromosomal DNA in which the wild-type/mutant sequence ratio approached  $10^8/1$ . Under such conditions, the potential for assay artifact should be considered, yet neither a zero time point nor an end point, in the form of cloned cells, was performed.

The implications of this data should demand the utmost in experimental control.

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## References

1. K. Thomas, K. Folger, M. Capecchi, *Cell* **44**, 419 (1986); K. Thomas, M. Capecchi, *ibid.* **51**, 503 (1987).