nections in those "citadels of virtue" described in the editorial.

As an international group of students, we are keenly sensitive to the effects of branding any one segment of the population as second-class. Editorials such as Abelson's engender and perpetuate such designations.

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Abelson quotes E. Ginzberg (*1*) as estimating at $250,000 the total expenditure society makes in "supporting a physician" for a year. Actually Ginzberg said, "the net addition of one physician adds approximately $250,000 to annual *operating costs of the health care enterprise*" [emphasis added].

In response let me say that we physicians render a service or, if you will, deliver a product, and hence our fees should not be construed as mere "support"; some portion of the price of a loaf of bread is for the bread, not for supporting the baker. Second, most of a physician's gross earnings "support" not himself but his landlord and staff, his Ma Bell, his Uncle Sam, and so forth.

Abelson presents a paradox by stating in consecutive sentences that there is "an excessive number of doctors" and "an infinite demand for medical attention." I agree that medical schools should refuse to accept government coercion, but the position could have been more lucidly and fairly presented.

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1. E. Ginzberg, *N. Engl. J. Med.* **297**, 814 (1977).

Recombinant DNA Controversy

Like several other cities, San Diego, California, reacted to concerns about recombinant DNA research by appointing a citizens' committee to consider what risks, if any, were involved for the general public. Although San Diego's committee worked in a less emotionally charged atmosphere than its counterpart in Cambridge, Massachusetts, the conclusions it reached were similar. One major emphasis of the San Diego com-

mittee's report was directed at the need for the University of California's Biohazards Committee to go beyond the letter, while retaining the spirit, of the National Institutes of Health (NIH) guidelines in its surveillance of recombinant DNA research on the university's San Diego campus.

The San Diego committee's report was accepted by the city council in late March 1977. Since then the concern within the scientific community about the real and potential hazards of the research has lessened, particularly with respect to the use of the K-12 strain of *Escherichia coli*, as reported in Philip H. Abelson's editorial (19 Aug., p. 721).

Regardless of the outcome of the current debate on the regulation of recombinant DNA research, I fear that, with the increasing evidence that the research poses less danger than had been believed by its critics, the need for improved laboratory safety may be disregarded. One of the conclusions reached by the San Diego committee is that laboratory design and practices in general are not always consistent with the level of risk to which investigators, students, technicians, and others are exposed. Concern about complying with the NIH guidelines has at least drawn attention to situations in which research institutions are poorly prepared to deal with the emergencies posed by laboratory accidents. Another result of the open debate on recombinant DNA research is the increased public awareness of science and its role in society. In the long run that too can be beneficial.

If the current heightened awareness of the problem of laboratory safety is diminished by reduced anxiety about the dangers of recombinant DNA research, at least one of the tangible benefits of the controversy may be lost. Such a development would be tragic from the point of view of everyone's best interest.

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Augmentation Trends

A hypothesis is always more interesting when accompanied by a test. I demonstrate here that the windedness index of M. O'Hare (Letters, 1 July, p. 6) gives an even stronger lengthening trend for writings in *Science* than I envisioned.

Before presenting the data, though, I wish to explain [see letter from R. J. Huxtable (15 July, p. 208)] that my original letter (10 June, p. 1154) was not intended as an attack on novelists as well as science news writers. Novelists and poets experiment with form as well as content and I do not want to impinge on their game. Consequently, I take as gratuitous the apparent support for my thesis provided by the Faulkner example of Huxtable. I should add, however, that I do not wish to annoy only news writers in scientific journals; I address all science writers and, in particular, all *Science* writers. Incidentally, the symptoms described by Huxtable, who falls asleep reading Boswell, may be due to periodomonotony (although Boswell's sentences are atrociously long, and there may be interaction). The onset of this curious clinical entity is manifested by slow eyelid lowering and saltatory head and body movements (in severe cases, injuries from falling out of a chair have occurred), apparently induced by an overregular repartition of typographical signs in a text. Writers can aid in eradicating this malady by avoiding uniform sentence length. Effective antidotes are LP's [long-windedness profiles (see my letter, 10 June)] having a skewed normal distribution (increased frequencies at shorter lengths) and a mean below 25 words per sentence. For a more radical treatment Huxtable might try reading G. Garcia Marquez, who writes without paragraphs or periods, although some commas remain (caveat: his novels are not placebos and may provoke sleeplessness).

As the French observe at railroad crossings, "*Un train peut en cacher un autre.*" Similarly, one trend can hide another. I am not ready to say what the fundamental trend is, but its expression in *Science* seems to involve *both* sentence length and report length. Thus, I now extend my demonstration to authors of reports. (I have also made compatible observations over the same period of articles and news items, but I do not describe them here because of a self-imposed length limit for this letter.) My sample is the first issue of *Science* in July of each year, from 1 July 1955, when the modern three-column design was adopted, through 1 July 1977. For each issue, I have measured the number of pages (P) and reports (R) in the Reports section. The results are shown in Table 1.

A plot shows that evolution of the ratio P/R approaches a straight line. As with many evolutionary processes, it is hard to believe this came about without design. Some workers may feel this trend has been established by the ran-