letters

while interviewing a candidate for a faculty position, describes the conditions in his department and university, then asks: "Why do you want to teach here? What is wrong with you?"

The problem is grave. It requires serious consideration, tremendous efforts and a much-needed national and public awareness; but above all it requires a solution.

I thought the notion of introducing a series of mini-courses on "hot" topics in modern physics would be valuable, not only because it would acquaint students with current topics and eliminate the perception that physics is neither new nor exciting, but also because it would tend to reactivate and rejuvenate some of the faculty in institutions where research is not the prime function. It is certainly an idea that deserves serious consideration.

I strenuously disagree with the statement that "the physics BS is not seen as a particularly useful degree, either by employers or by students." The active recruitment of our graduating seniors by the local industry practically depleted our graduate program and forced us to offer all our graduate courses in the evenings. The problem is compounded by the fact that the salaries of these young scientists are generally higher than what we offer to a PhD seeking a faculty position at the assistant professor level.

I have another illustration of the worth of a BS in physics: Recently, while celebrating the successful conclusion of an industrial associate contract between TRW and California State University, Long Beach, the master of ceremonies, Berry Yolkin, an engineer himself and the Manager of TRW Ground System Development, introduced one of our recent BS graduates by saying, "And our best engineer is a physicist." There were at least twenty engineers in the audience.

S. I. Salem
California State University
Long Beach, California

3/84

Editorial changes

Burton Brody (March, page 11) is not alone. Those of us who are merely authors are often infuriated by editorial changes. We, too, have an ear for good English. Rejoice in individuality, and let our prose be. (I ceased reading *Scientific American* because every article sounded just like all the others I had read.)

Nowhere have I seen the issue put more clearly than in Arthur Plotnik's *The Elements of Editing* (Macmillan, 1982, page 32):

All too true. The first impulse we

The strongest drive

is not love or hate.

It is one person's need

(modify), revise alter

to change another's copy.

rewrite amend chop to pieces

change

have with another's copy is to make it *sound* right, and what sounds right to us is our own voice, our own idiom. Also, the more we change another's copy, the more we seem to justify our own editorial importance, perhaps even our job. Sometimes office politics plays a part in heavy-handed editing. The second editor along the line must show how incompetent the first editor was by finding a dozen more "corrections," all of them arbitrary.

RALPH BAIERLEIN
Wesleyan University
Middletown, Connecticut

3/84

More on nuclear winter

I would like to contribute two more "points at issue" in your report on Carl Sagan's "nuclear winter" in February (page 17). First, Sagan's baseline scenario visualizes 10 times the burn area as that of wildfires today. But the burn area of wildfires in North America in the 1920s was about 10 times what it is today, with no resulting difference in climate. Second, and even more important, is the fact that Sagan assumes that the smoke emission from the baseline scenario would be 100 times more effective in "perturbing the atmosphere" than ordinary wildfire smoke (100 times the optical depth). (See page 1285 of the TTAPS article in *Science*, 23 December 1983.) Without this outrageous assumption, the calculations would indicate a minor effect on climate.

LLOYD P. HUNTER
Rochester, New York

2/84

AN AUTHOR COMMENTS: Lloyd Hunter has apparently misinterpreted our comparison of the effects of "background" smoke with the smoke produced by a nuclear war.[1] The "war" smoke is injected into the atmosphere over a short time span, at a relatively high altitude and over a limited geographical region. Background smoke is