always the style of the references must be drastically changed.

This is a plea for uniformity in the manner of presentation of references. Why should *Science*, the *American Journal of Physiology*, the *Proceedings of the Society for Experimental Biology and Medicine*, and so forth, each have a different format for references? If the journals that publish scientific articles would adopt a uniform reference system, the work of the secretaries who retype rejected manuscripts would be greatly reduced. Which uniform system to adopt could best be settled by a conference of journal editors such as one recently held by a group of editors of biochemical journals (*1*). We suggest the following features as desirable: (i) a consecutive series of reference numbers in the text rather than a listing of references alphabetically by author; (ii) inclusion of the full title of each article listed—often the most useful and informative part of the reference list; and (iii) uniformity of abbreviations of journal titles.

Perhaps it is too optimistic to expect such individualists as journal editors to adopt a uniform procedure, but we hope our suggestions will be given serious consideration.

PHYLLIS M. STOLDAL
DAVID B. GORDON
Research Laboratory,
Veterans Administration Hospital,
Livermore, California 94550

References

1. IUB [International Union of Biochemistry] Commission of Editors of Biochemical Journals, *Biochemistry* **12**, 4301 (1973).

Hybrid Cell Proposed

Most present attempts to produce cheap protein are concerned with such organisms as algae and yeast, or with improved cereals, such as lysine-rich sorghums. Although these sources could be cheap, their nutritional value cannot be compared with that of animal protein.

As an alternative, I wish to propose the synthesis of a hybrid cell composed of Chlorella (a single-cell algae containing chlorophyll) and such animal cells as bone-marrow cells, liver cells, or others. Such a hybridization could perhaps be accomplished by means of deactivated Sendai viruses, by nuclear transplantation, or by other techniques. If the hybrid cell is viable, it could then be grown in culture. The resultant clones could then be screened for selection of those with the most desirable characteristics—speedy growth, retention of chlorophyll, high nutritional value, genetic stability, and an acceptable taste. Such a hybrid cell would, if realizable, obtain its energy cheaply through photosynthesis and yet have the high nutritional value of an animal cell. We might thus combine the value of meat and vegetable in one cell.

N. NASHED
Feuerbachstrasse 3,
6 Frankfurt am Main, Germany

Cuban Science

In 1973, a small group from various colleges and universities in the United States visited Cuba at the invitation of the University of Havana. Three of us were scientists. What we saw of Cuban science was both exciting and depressing.

Cuban science is in a highly expansive period (*1*). In 1955, about 30 university degrees in science were granted (*2*). The December 1972 graduating class at the University of Havana included 450 students in the natural sciences, 557 in technology (engineering), 635 in medicine, and 230 in agriculture. This tremendous increase in scientific training is not due to any remuneration: scientists get no special privileges and, in fact, may be paid less than certain skilled workers. Instead, Cubans at all socioeconomic levels have come to realize that the development of science in their country is inextricably linked to their emergence from an underdeveloped economy.

The qualitative aspects of Cuban science are also worth noting. In many fields, including university teaching and medicine, women and blacks have achieved or are approaching proportional representation. In 1972, the Faculty of Science at the University of Havana had 205 male and 185 female professors, and 1493 male and 1496 female students. Serious thought and effort have gone into trying to avoid a total distinction in status between intellectual and manual labor. While putting a certain amount of resources into developing pure science, the Cubans have put most of their effort into linking science and technology to developmental needs.

For all their strides, the Cubans are seriously hampered by two problems, both of which are related to the U.S. blockade of Cuba. First, equipment in many teaching and some research laboratories is old, primitive, or makeshift. Second, and more important, there is a dearth of teaching materials and scientific information. Many of the texts used in biology, for example, were published in the United States before the 1959 revolution. Cubans find it difficult to get copies of U.S. journals and impossible to receive them on a regular basis. They also have difficulty getting some Western European and international scientific journals. Finally, Cubans often find it difficult to get their work published in Western journals. Although individual books and journals may be mailed to Cuba, official U.S. discouragement, travel restrictions, and various impediments on bulk shipments prevent any significant exchange (*3*).

The charters of the United Nations, UNESCO, and the World Health Organization call for the diffusion of developmental and technical information. It is ironic, then, that Cuba, one of the few Third World countries in a position to employ this information, is prevented from obtaining it. Conscientious scientists in the United States, who have traditionally supported freedom of dissemination of scientific information, are in a position to change this state of affairs, perhaps by initiating discussions of the situation with fellow scientists or by writing to the State Department. An end to the blockade of Cuba, which would allow meaningful exchange between the United States and Cuba, should be vigorously supported by us all.

HUGH I. ELLIS
Department of Zoology,
University of Florida,
Gainesville 32611

MOE LEVITT
School of Contemporary Civilization,
Queens College, City University of
New York, Flushing 11367

ANNE FAUSTO-STERLING
Division of Biological and Medical
Sciences, Brown University,
Providence, Rhode Island 02912

References and Notes

1. M. Roche, *Science* **169**, 344 (1970).
2. Statistics for 1955 were provided by the Faculty of Science, University of Havana.
3. Anyone interested in sending books or journals to Cuba can contact one of us. Although new editions are preferable, older books that are not badly out-of-date would be useful.