These considerations are promoted by the following case history. Some years ago my co-workers and I described and partially purified an enzyme found in some plants and animals which hydrolyzes hydantoin to hydantoic acid [J. Biol. Chem. 163, 683 (1946); 181, 449 (1949)]. Since no substituted hydantoins were hydrolized, the name hydantoinase seemed appropriate. The enzyme is very active but its function is not clear, since nobody has been able to bring unsubstituted hydantoin into any metabolic scheme. This is always somewhat frustrating.

In 1957, Wallach and Grisolia [J. Biol. Chem. 226, 277 (1957)] further

purified the enzyme, which they said we called hydantoin peptidase—a name we had not thought of. This preparation, which was 80-percent pure, hydrolyzed hydropyrimidines as well as hydantoin. They renamed the enzyme hydropyrimidine hydrase, and Dixon and Webb [Enzymes (Academic Press, New York, 1958)] rapidly made a further contribution by calling it dihydropyrimidinase.

The enzyme now has a respectability it did not have as a simple hydantoinase, since everyone is interested in pyrimidines and nobody in hydantoin. But, as Wallach and Grisolia showed, the turnover number for hy-

dantoin is 27,000; for hydrouracil, 4300; and for hydrothymine, 420. The  $K_m$  for hydantoin is higher than the  $K_m$  for the pyrimidines, but these values have not been used as criteria for naming enzymes.

The question is this: Does one name an enzyme after the substrate most rapidly attacked, or after the substrate of most interest? Apparently the latter. One is reminded that some years ago certain towns in Russia changed names in accordance with the current political status of the leaders. Perhaps enzymes should be named in accordance with the current metabolic status of the substrates.

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## **Advancement of Scientists**

Please accept my resignation from the AAAS in protest of your policy, which, in my opinion, fails to advance science because of your reluctance to aggressively push for the advancement of scientists. I am not denying that you do a good job in disseminating the facts of science, and you may even encourage a certain amount of research. But the fact remains that science will only really be advanced when the scientist himself has gained greater status, more recognition, and more acceptance by the average American as someone to look up to. The American Medical Association has accomplished this for physicians in the United States. What we need is a comparable association that will achieve this for America's Ph.D. scientists.

Whether or not you like this approach, or whether you feel that it goes against the grain of your organization to compromise the scientific ivory-tower tradition, the fact remains that the Ph.D. scientist is not generally compensated in our culture for the sacrifice, effort, and skill that his extensive training entails. I don't like the idea of unions being necessary, but if it takes a "union" (such as the AMA) to get the scientist his due, then any organization dedicated to the advancement of science must transform itself into a union.

My resignation is predicated on the fact that I believe that it is a hopeless task to try to influence the AAAS in regard to its obligation to the scientists. This is not the first correspondence I have had with your office on this subject. Therefore, I feel that I must resign. As a final request I will ask you to print this letter in Science.

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