dividuals have had similar experiences with the same journal. This practice raises serious questions concerning publishing ethics. Over and above the injustice to particular authors is the problem of journal credibility in general. Historians of science in particular must find this practice unsettling, since it raises questions as to which misinterpretations or mistaken nuances in an article are those of the author in question and which are those of an anonymous editorial assistant.

It is difficult for individuals to monitor such problems of publishing ethics or to alert the scientific community to this or similar problems of which it may be unaware. It would appear there is a real need for some scientific organization to establish a mechanism for the investigation of problems in the ethics of scientific communication.

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Rabies Shots

In his Research News report of 28 December 1973 (p. 1329), Thomas H. Maugh II writes that "individuals who have been exposed to rabies or whose jobs or hobbies open them to exposure (veterinarians and spelunkers, for example) normally require a series of 14 to 21 daily injections of rabies vaccine to produce immunity. . . ."

It is true that authorities urge "high-risk" individuals, such as animal handlers, to get preexposure rabies vaccinations. However, this initial series of injections involves only two to four shots spread out over 2 weeks to 6 months. Anyone who has had preexposure vaccinations and who possesses sufficient antibodies need only receive one to six injections if subsequently bitten by a known rabid animal. It is neither recommended nor necessary for anyone except unvaccinated persons who have been significantly exposed to rabies to have "14 to 21 daily injections."

The advisability of preexposure rabies vaccination has not been widely accepted by scientists and by others who work with animal species that could potentially expose them to rabies. Part of this reluctance is because of the misconception that the initial series involves 14 to 21 daily injections.

As Maugh states, the new Wistar vaccine will probably reduce the vaccine side effects and may someday allow even further reduction in the number of injections necessary both before and after exposure to rabies.

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Definition of the Meter

It may be useful to follow up on my letter (29 June 1973, p. 1321) on the speed of light and its implications, or lack thereof, for the study of the solar system. The following passage is excerpted from a resolution adopted by the International Astronomical Union (IAU) at its General Assembly in 1973 (*1*).

> The International Astronomical Union . . . recommends that when the most precise value of the speed of propagation of electromagnetic radiation in vacuum is required, the value proposed by the Consultative Committee for the Definition of the Meter . . . , namely $c = 299\ 792\ 458$ meters per second, should be employed, . . . and that the International Committee of Weights and Measures *maintain this value in any redefinition of the meter* [italics mine].

The last phrase carries the clear implication that the meter is to be redefined as a specified number of light-seconds, thereby reducing it to a secondary unit. There has been some confusion over the motivation, even the propriety, of doing this. The lone negative vote cast among the IAU members present was due to concern over the "legislation of constants of nature."

Of course, there is nothing of the constant of nature about the meter or any measure related to it. It was originally defined, after all, as an arbitrary fraction of the circumference of a small planet whose primary astronomical importance consisted of its being the habitation of all known astronomers. Nothing could be more ad hoc. The present conventional definition is based on a transition wavelength of krypton, which may be more accessible, but is hardly an improvement in principle. At the time of its adoption, this definition seemed safe enough, but its freedom from ambiguity was only assumed. It apparently did not seem important that both the meter and the