planus of the oral mucous membrane; the effect of vitamins in the treatment of desquamating glossitis; the loci of uptake of sulfur-labeled methionine in the mandible; and (with Garazha) the occurrence, in purulent disease of the lung, of similar changes in the terminal phalanges and in the parodontium, where the changes characteristic of chronic parodontal disease accompany pulmonary disease of a chronic purulent type in a large percentage of cases. Platonov, a very experienced clinical investigator, has published neuropathological findings that suggest a neurotrophic factor in parodontal disease.

Sniakin, the physiologist, who teaches in the institute but has his laboratory elsewhere, has been studying the change in responsiveness of the nerve endings of the oral mucosa in various conditions and has shown that change in the "mobility" of these receptors is a very early occurrence in parodontal disease.

Kurliandski, oral surgeon and prosthetic specialist, has done a great deal of research on the surgical treatment of parodontal disease, has made very meticulous studies of the balance of forces between the teeth and the jaws in relation to prosthetic appliances, and has made a striking study of stress patterns in the mandible as demonstrated by optical stress patterns observed with polarized light.

It may be seen from this account that there is a common effort in clinical research on parodontal disease—the condition which, with caries, is the most costly of all stomatological conditions (its cost in the United States is about $1 billion a year).

Perhaps the most exciting work on parodontal disease is that done by Evdokimov and Prokhonchukov, the latter often working in collaboration with Federov. Evdokimov, founder of the institute, who has been, successively, peasant, feldsher, dentist, surgeon, and head of the Moscow Medical Stomatological Institute, has demonstrated, in my opinion, that the primary change in parodontal disease is an insufficiency of the smaller vessels of the parodontium—an insufficiency which is at first latent and then becomes visible as a sclerotic change with swelling of the endothelium; this change leads to occlusion of the vessels and is accompanied in many cases by perivascular infiltration. Evdokimov and his associate showed me very beautiful slides from autopsy material of persons with parodontal disease. This work on the changes in naturally occurring parodontal disease is paralleled by the very interesting work of Prokhonchukov, one of the younger men of the institute, who, besides working on human clinical parodontal disease, has (with Federov) produced in rats, through repeated doses of whole-body radiation, parodontal disease closely similar to that in human beings. Prokhonchukov's observations in this area have been repeated in the United States by Greulich.

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Weinberg Report

Perhaps many scientists should read the Weinberg report, but I suspect that most will read your editorial on "Science, government, and information," and be influenced by your critique. . . . [*Science* **139**, 1015 (15 March 1963)].

Authors and reviewers that I know are honored and highly respected. It is true that these men have proved themselves competent scientists at some time and often remain active in the laboratory after they have become editors and critics. The other side of the coin, which you are recommending be implemented—"that some scientists and engineers 'commit themselves deeply to the job of . . . reviewing' "—deserves ardent consideration on one obvious score: Who will judge the scientific aspects of the manuscripts submitted to a journal if the reviewers and critics of the new breed have not been tried and proved by creative laboratory effort? The referee system is presumably designed to overcome this hurdle at present. Doesn't it work satisfactorily? Is it not a just compromise?

. . . It is better to encourage more, not less, laboratory effort as well as writing, and more of everything that goes with writing—rewriting, editing, and growth for all concerned. The excuse that there is not enough of some particular component in the work chain cannot be answered by cutting at the heart of the whole effort—those who do the laboratory work and write the "first drafts."

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