With McCamy's plea in "The need for thinkers," with his well-documented efforts to get at the facts about the experience and training of those normally available for career foreign service and State Department posts, even with the "myth" of untrained, noncareer diplomats, one may express sympathy and gratitude for his emphasis. Clear lines of authority are needed. But they are rarely achieved by exhortation, and they are difficult to work out without some machinery for priority in policies applied to interagency programs, which nothing in the present setup of the Bureau of the Budget provides, except by default through the overall method of agency ceilings.

The machinery of the National Security Council could effectively reintroduce the technique of the wartime "requirements committee" by using some experienced high-level advisers, who have time to think. Such advisers, at least the few at the top, should have had enough high-level experience not to meddle, but to give the President a reasoned prebudget review of what interagency programs, or those affecting the whole of national security and foreign policy, need in the way of timing, support, and attention, whether they should be stepped up or phased out.

McCamy is pointing to a need. His direction could use more precise indications of ways, means, and location. No doubt the Bureau of the Budget has a highly competent and informed staff available on assignment to act under such skilled policy direction. But the Bureau itself is not equipped to set the policies that it is to apply, despite the final report of the Jackson Subcommittee of the Senate Government Operations Committee.

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Biochemistry

Advances in Lipid Research. vol. 1. Rodolfo Paoletti and David Kritchevsky, Eds. Academic Press, New York, 1963. xiv + 418 pp. Illus. \$14.

The inauguration of still another series of Advances has its somber side. Another shelf is to be lined with volumes that will silently reproach those of us who, although we feel that we should, somehow cannot find the time to grapple with even these

condensations of research areas, which are made so conveniently (tantalizingly?) available to us. Still, if we cannot stop the world of biochemistry, we must do our best to keep up with it, and the review article is currently our best hope. Until the computers begin to exercise more refined judgments and show deeper correlational potentials, we shall continue to rely heavily on adequately motivated flesh-and-blood reviewers for our orientations and briefings. Academic Press continues to be effective in motivating editors, who in turn continue to be effective in motivating authors, who in turn continue to be effective in motivating readers, including this one.

I found many of the articles in this first volume extremely useful and provocative. D. S. Robinson, for example, has written carefully and critically on clearing factor lipase. Instead of simply omitting mention of papers in which questionable results are reported, a tendency among some reviewers, Robinson considers such papers and makes an honest attempt to assess their significance in relation to the available evidence. I. B. Fritz has contributed a comprehensive and provocative review of studies on the role of carnitine in fatty acid metabolism, a field opened up by work in his laboratory. H. Danielsson has written a nicely balanced review that covers mechanisms of cholesterol conversion to bile acids and of sterol excretion per se, together with an extensive discussion of regulatory mechanisms.

Other chapters are "The structural investigation of natural fats" (M. H. Coleman); "Physical structure and behavior of lipids and lipid enzymes" (A. D. Bangham); "Recent developments in the mechanism of fat absorption" (J. M. Johnston); "Vitamin E and lipid metabolism" (R. B. Alfin-Slater and R. S. Morris); "Atherosclerosis—spontaneous and induced" (T. B. Clarkson); "Chromatographic investigations in fatty acid biosynthesis" (M. Pascaud); and "The plant sulfolipid" (A. A. Benson).

Of course, most readers who pick up the volume will expect to get an organized survey of a few selected topics from the mixed menu. From my own experience, I would guess that they will not be disappointed. Certainly those working more or less directly on some aspects of lipid research will welcome the availability of this new series. It is to be hoped, however, that the editors will not feel obligated to

produce their volumes with a relentless frequency that might exhaust the supply of more capable reviewers and unnecessarily burden us well-intentioned keeper-uppers with the broad area of lipid research.

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Survey and Sourcebook

Primary Embryonic Induction. Lauri Saxén and Sulo Toivonen. Logos Press, London; Prentice-Hall, Englewood Cliffs, N.J., 1963. xii + 271 pp. Illus. \$8.75.

The current explosion of interest in developmental biology has caused many nonembryologists to confront and begin an almost hopeless excursion into the mountains of literature on embryonic induction in the Amphibia. It is fortunate, therefore, that a virtual panacea is now available in this penetrating analysis by Saxén and Toivonen.

The history of work on the primary induction phenomenon, wherein the axial mesoderm of amphibian embryos induces formation of adjacent central nervous system tissue, serves as an introduction to various experimental approaches used in studying the problem. The bulk of the volume is then devoted to a summary of what is known of inducing and responding tissues and of mediating factors in the interaction. The final part is an extensive theoretical section in which the major explanatory theories of the various European and Japanese schools are treated fairly and extensively while they are being compared to the authors' personal hypotheses.

The essential conclusions are that at least two chemical mediators are involved in induction of the brain-spinal cord system, and that complete characterization of the substances is still unfinished. The authors rightfully emphasize the difficulties encountered in interpreting experiments in which a substance is applied to a tissue on one day, the tissue is ignored for a week, and then a questionably accurate (histological) assay is employed in garnering results. Discussion of experiments on secondary (that is, organ) induction and cytodifferentiation in Amphibia and higher vertebrates allows one to see how the primary induction system may be separated into component parts in