

Preface

The motivation for us to produce a treatise on regulation was mainly our conviction that it would be fun, and at the same time productive, to approach the subject in a way that differs from that of other treatises. We had ourselves written reviews for various volumes over the years, most of them bringing together all possible facts relevant to a particular operon, virus, or biosynthetic system. And we were not convinced of the value of such reviews for anyone but the expert in the field reviewed. We thought it might be more interesting and more instructive—for both author and reader—to avoid reviewing topics that any one scientist might work on, but instead to review the various parts of what many different scientists work on. Cutting across the traditional boundaries that have separated the subjects in past volumes on regulation is not an easy thing to do—not because it is difficult to think of what interesting topics should replace the old ones, but because it is difficult to find authors who possess sufficient breadth of knowledge and who are willing to write about areas outside those pursued in their own laboratories. For example, no one scientist works on suppression *per se*. He may study the structure of suppressor tRNAs in *Escherichia coli*, he may study phenotypic suppression of various characters in drosophila, he may study polarity in gene expression, and so on. Anyone who takes on the task of reviewing suppression must be willing to weave together the various parts of the subject, picking up the threads from many different laboratories, and attempt to produce a fabric with a meaningful design. Finding people who are likely to succeed in such tasks was the most difficult part of our job, since the qualifications required are not the same as those by which we are accustomed to evaluating our colleagues. For example, a high degree of productivity as a research scientist is not nearly so important as is the ability to think deeply about scientific issues.

Having determined at least to make a try at accomplishing our goal, we were surprised and gratified to find that we had been sufficiently convincing to enlist the participation of a group of authors we considered truly outstanding for the enterprise. But after getting that far, we were a bit anxious about what the outcome would be; after all, no amount of editing can alter significantly the

substance of what an author has to say. As the manuscripts appeared, we were relieved to find that the authors had taken to heart the charge we had given them. We noted, for example, the high frequency with which the same system was discussed from different points of view by different authors; the multiple instances in which not only a structure or phenomenon was discussed, but also its possible evolution; the willingness of authors to make interesting speculations; and so on. Thus, having gotten what we asked for from our authors, it is we who must take the blame from any reader who is dissatisfied. As for taking credit, we are afraid that it will belong to the authors themselves; although we took an active role in editing, it is only the authors' contributions that can make the basic philosophy of this treatise work.

Robert F. Goldberger
Paul Berg
Leroy E. Hood
Philip Leder
Kivie Moldave
Robert T. Schimke