

The only fault's with time

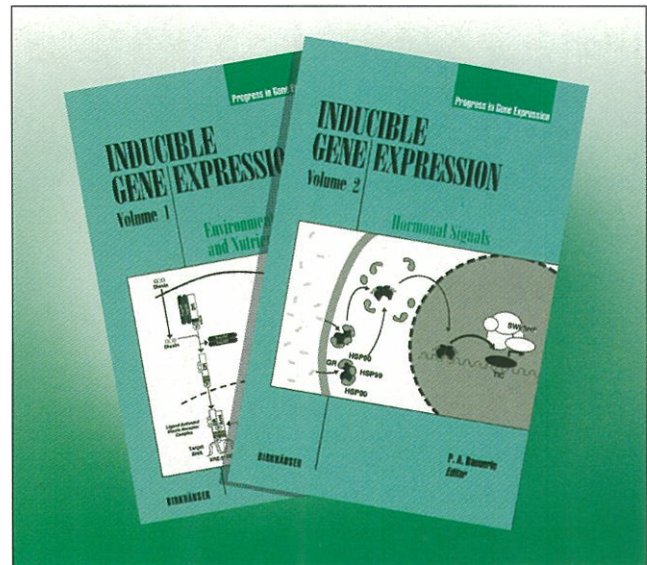
Chemistry & Biology December 1995, 2:805

Inducible Gene Expression: Vol. 1. Environmental Stresses and Nutrients edited by PA Baeuerle. Birkhäuser, 1995, 250 pages. \$85.00 hardcover (ISBN 0-8176-3728-1) and **Vol. 2. Hormonal Signals** edited by PA Baeuerle. Birkhäuser, 1995, 250 pages. \$85.00 hardcover (ISBN 0-8176-3734-6).

Since the great insight of Jacob and Monod, it has been recognized that transcriptional control is the central regulatory event of virtually all cellular processes, be it growth, differentiation or functional activity. From the early examples of lac repressor and lambda repressor, the cast of characters involved in transcriptional control has grown to the point where it is quite appropriate that an entire series of books be devoted to 'Gene Expression'. The number of 'transcription factors' is now in the many hundreds and sure to go into the thousands. The books presently under review look just at those factors that allow a cell to respond to external cues by inducing new gene expression. They are good books, containing articles written by active experimentalists, covering key issues like gene induction by hormones, stress, carcinogens, radiation and metals.

A significant question raised by such books is 'Who is the audience?' The references in these articles mainly end in 1993 with generally only the authors' own contributions in 1994 being mentioned. The books therefore cannot be used by the hard-pressed professor to prepare his graduate student lectures, because the students would be liable to be more up-to-date than the professor. Similarly, it is of little use to the student who wants to understand the leading edge of discovery. They will be of use to students who are just beginning to think about these issues and to those who are preparing their theses and need reference to earlier literature. They are also useful for people in adjacent fields who may wish to be initiated into the arcana of the transcriptional field.

From this perspective, it is worth noting that many authors have provided good general backgrounds to their particular subjects. Oehler and Müller-Hill provide



some important perspective on the different problems posed to prokaryotic and complex eukaryotic transcriptional systems. Others introduce heat shock factors, Jun, Fos, NF- κ B, the fascinating helix-loop-helix dioxin receptor and the many steroid receptor-like mediators of responses to lipophilic hormones. Some reviewers seem overly focused on the contributions from their own laboratories but most cast a wider net.

All in all, a useful pair of volumes which could be much more useful if they were up-to-date. Here is a good potential use of the internet — to provide reviews of particular subjects that could be as timely as the authors were willing to make them. With electronic publication, the publisher need not be the limiting factor in the process and the publication need not be held up by dilatory authors.

David Baltimore, Department of Biology, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139, USA.