## **BOOK REVIEWS**

Current Communications in Molecular Biology – Translational Control. Edited by M. B. MATHEWS. Cold Spring Harbor Laboratory. 1986. 194 pages. Paper, \$27. ISBN 0 87969 191 3.

The control of gene expression at the translational level is frequently forgotten or, at best, overshadowed by the far more familiar events which regulate transcription. The importance of this volume is that it goes a long way towards correcting the balance. In particular, it is made clear right from the introductory chapter that translational control is not simply a measure of the strength of ribosome binding sites but that there is a wide variety of effective, and often subtle mechanisms by which the translatability of mRNA can be regulated. Such mechanisms are not merely theoretical but can play an important role in determining the expression of specific genes.

'Translational Control' is a compilation of the proceedings of a meeting under the auspices of the Cold Spring Harbor Laboratory. As is stated in the organizer's preface, this is not a subject that 'regularly commands its own meeting', but that this seemed an 'opportune moment to gather together some of the leading practitioners in the field'. In the event he has been proved right. Unlike many such conference volumes, 'Translational Control' succeeds in being more than just a collection of specialized and unrelated papers and can be usefully read, either for selected articles or as a relatively coherent whole. The volume covers essentially every aspect of the subject, ranging from a discussion of the role of mRNA secondary structure, the factors which influence interactions between ribosomes and mRNA during initiation, the translational control of differentiation, to the exciting prospects of experimentally manipulating gene expression using complimentary RNA to interfere with translation. My only reservation, which admittedly reflects a personal bias, is that prokaryotic systems are rather under-represented. This is particularly unfortunate as there have been a number of recent and exciting advances in this area which suggest that the factors which influence the interaction of ribosomes with mRNA may best be resolved in bacterial or phage systems.

By its very nature, dealing with the 'state of the art', much of this volume will soon be out of date. However, because most aspects of the subject are brought together for, as far as I am aware, the first time, the book will certainly remain a key source of reference for many years to come. It is useful, both to the expert and to the interested 'layman'. In addition, I have even recommended certain chapters as additional reading and as a source of reference to our final year undergraduate students. Thus, this book should certainly be on the shelves of any library which caters for molecular biologists.

CHRISTOPHER F. HIGGINS, Molecular Genetics Laboratory, Department of Biochemistry, University of Dundee

Essentials of Behaviour Genetics. By David A. Hay. Blackwell Scientific Publications. 1985. 359 pages. £15.80. ISBN 0 86793 0640

This is an extremely good book and I give it a particularly warm welcome because it is the first text book of behaviour genetics that I can unreservedly recommend for students. The major source in the field remains Fuller & Thompson's Foundations of Behavior Genetics (an enlargement and update of their pioneer 1960 text) but this is too detailed for an undergraduate course. In fact there can be few courses in behaviour genetics in this country at present, but even for those of us who can afford only a few lectures, Hay's book has much to offer.

It is most clearly and attractively written. The whole book is well set out for use with students. There are main references and additional readings given at the end of each chapter. Each begins with a summary of the main points to be covered and ends with a few ideas for discussion. The book's layout makes the best use of a skewed set of data. For better, for worse, we must accept that behaviour genetics as she is identified concentrates very much on human behaviour and