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BOOK REVIEW

WATSON, J. D., HOPKINS, N. H., ROBERTS, J. W., STEITZ, J. A., WEINER, A. M.: MOLECULAR BIOLOGY OF THE GENE. 4th EDITION. Vol. 1. General Principles; Vol. 2. Specialized Aspects. – The Benjamin/Cummings Publishing Company, Inc., Menlo Park-Reading-Don Mills-Wokingham-Amsterdam-Sydney-Singapore-Tokyo-Madrid-Santiago-San Juan 1987. 1163 pp.

After more than 10 years which elapsed from the last (already third) edition of the world famous textbook of molecular biology there is a new one. During these years the amount of new information has multiplied in such a dynamically developing area especially after a breakthrough *i. e.* the development of the recombinant DNA technology and DNA sequencing, which influenced the new form of the fourth edition. It is divided into two volumes with nearly 1200 pages of text altogether. As this is beyond the scope of a single person there are four other co-authors besides J. D. Watson (N. H. Hopkins, J. W. Roberts, J. A. Steitz and A. M. Weiner).

The first volume deals with general principles of the structure and function of both procaryotic and eucaryotic genes. It is written along similar lines as the previous edition enriched of course by the new findings. The contents are divided into 8 parts covering introductory biochemical and genetic information (parts Historical Background, Chemical Facts and Principles, Bacterial Genetics) and then there are the following sections: DNA in Detail, The Steps in Protein Synthesis, Regulation of Gene Function in Bacterial Cells, Facing up to Eucaryotic Cells and The Function of Eucaryotic Chromosomes. These parts are subdivided into 21 chapters. This volume can be used as a textbook of molecular biology.

The second volume is focused on some specialized aspects of molecular biology, such as molecular biology of development, of immunological questions; then it also contains chapters on eucaryotic viruses and cancer at the genetic level. In the concluding chapter the evolution of DNA is discussed. It is to be expected that in further editions this volume will be more and more extensive.

Each of the problems is discussed (like in earlier editions) in a clear and concise style and is accompanied by a number of schematic diagrams, drawings and photographs which facilitate the comprehension of the demanding text. The number of reviewers (over 80) proves that much attention was given to the preparation of the text. If we consider the amount of the work done, a few mistakes *e. g.* in the table of contents of chapter 28, Vol. 1 can be excused.

In the preface the authors hope that this new edition will again be used as a suitable textbook for instruction at the undergraduate level. Their wish will certainly come true. I don't think that such a good book needs any recommendation, it will find its way to the reader easily in itself. Let's look forward to the next edition.

P. ŽÁK (Praha)