

During the last decade great progress has been made in cell biology and, most notably, we are beginning to appreciate the relationship between cell ultrastructure and physiological activity. This book opens with a survey of current techniques, as it is advances in technique that have in part allowed this insight. Subsequent chapters on prokaryotic and eukaryotic ultrastructure, enzymes, membranes, cell movement, nucleic acids and protein synthesis each include a review of current trends which often point up applications in medicine and biotechnology. A special review chapter tackles the fundamental question of the origin and evolution of pro- and eukaryotic cells. This chapter presents some of the very recent ideas on origins and adaptive radiation of cell types.

*Cell biology* thus offers a balanced and up-to-date account that will be much appreciated by advanced sixth form students and their teachers, and by first year students in universities and colleges. It bridges the gap between school text books and university research-based teaching. To achieve this, each chapter has been written by a specialist researcher and the whole rigorously edited into a coherent, integrated volume by an experienced 'A' level teacher who has paid close attention to the level of knowledge assumed. The book is richly illustrated with micrographs and specially commissioned line drawings.

This is the first volume of *Modern views in biology*, a series published in association with the *Institute of Biology*. Spanning the whole of biology, the series aims to build on the basic framework encountered in sixth form teaching and to develop modern and accessible accounts of important areas of the subject. The combination of researcher contributor and teacher editor is designed to achieve this and the current trends sections of each chapter help to focus attention on new directions and possible applications. The series is attracting contributors who are both eminent in their field and also excellent communicators.

Dr Barry King, the series editor, is head of biology at Stowe School. He is married with two children and his spare time interests include designing computer software, conservation and gardening.

The *Institute of Biology* is the professional body representing biologists in the UK. It sets standards, promotes education and training, conducts examinations, organizes local and national meetings, and publishes the journals *Biologist* and *Journal of Biological Education*.

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