

# Preface

At the start of the 20th century, there were only a handful of effective drugs: morphine, quinine, cocaine, aspirin, and a few inorganic salts for gastrointestinal problems. A serious bacterial infection and most cancers would usually be a death sentence for the patient. One hundred years later, there are literally thousands of efficacious drugs – bacterial and viral infections (including HIV) can be successfully treated, and even certain cancers can now be cured. This book describes the evolution of these life-saving drugs that have so revolutionised the treatment of disease, and emphasises the roles played by those who discovered these molecules.

The three main chapters deal with drugs for the treatment of bacterial and viral infections, and cancer; then, the final chapter reveals the new advances that have been facilitated by our growing understanding of the genetic basis of disease. It was never my intention to write a research text, although the bibliography will allow readers to gain access to key research papers; the book is also not intended to compete with the standard textbooks of medicinal chemistry. It should, however, provide an excellent source of background material for students of medicinal chemistry, pharmacy, and even medicine and pharmacology.

The first edition of the book was written primarily for the popular science market; hence, it could not contain chemical structures. It was well-received, with excellent reviews in both *Nature* and the *Times Literary Supplement*; but without the chemical structures, it was impossible to give due prominence to all the fabulous molecular species that have so improved our quality of life and chances of survival. This new edition has been completely updated and expanded, and includes the chemical structures and modes of action for most of the drugs discussed. I hope that it will be of interest to anyone who wants to know more about the molecular entities that comprise the life-saving drugs.

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**for Cressida and Octavia**