

PREFACE

Reginald Chapman's *The Insects: Structure and Function* has been the preeminent textbook for insect physiologists for the past 43 years (since the moon landing, in fact). For generations of students, teachers and researchers *The Insects* has provided the conceptual framework explaining how insects work. Without this book, the lives of entomologists worldwide would have been substantially more difficult. Nevertheless, the most recent (fourth) edition of this remarkable book was published in 1998, and a great deal has happened since then. Sadly, Reg died in 2003 and there was no reasonable prospect of any other person taking on the next revision single-handed. We have decided to take a different approach: to invite a team of eminent insect physiologists to bring their expertise to the collective enterprise of writing the fifth edition of *The Insects*.

Our aim has been to protect the identity of *The Insects* by working with Reg's original text. Certain areas have needed more revision than others, and some sections have been shrunk to accommodate advances in others. Our sole major deviation from the style of previous editions has been to remove all citations to primary literature from the main text. These in-text citations had accreted across successive revisions, and were somewhat patchy in coverage throughout the book. With the availability of online literature search engines today, students and researchers alike are better served by a short list of key references at the end of each chapter to provide a lead-in to the literature.

It has been the greatest pleasure for us to work with 23 colleagues from seven countries over the last four years, as the fifth edition of *The Insects* has taken shape. This project brings into sharp relief the intellectual strength and vigor of our discipline – the new discoveries over the last 14 years since the fourth edition are nothing short of breathtaking. We have also come to admire, more than ever, the breadth of Reg's knowledge and understanding of insects. He was a remarkable man.

STEVE SIMPSON and ANGELA DOUGLAS