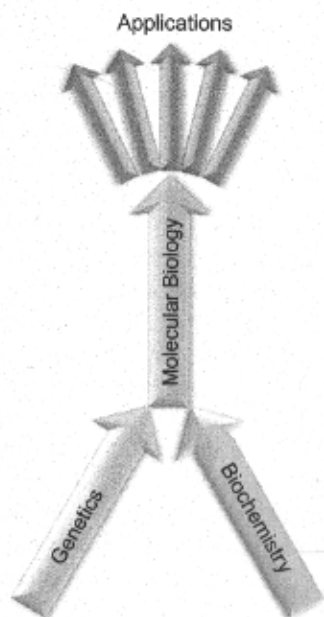


# Preface

Within the past century, a whole new science has arisen, a new way of understanding biology and medicine. The applications of this science, which has come to be called **molecular biology**, pervade every aspect of our lives today and promise even more in the future. Molecular biology has arisen from roots in biochemistry and genetics—has in fact fused these disciplines to provide an understanding of life at a much deeper level than was hitherto possible (Fig. 1.1). As is often the case with new science, unexpected applications have arisen and created whole new industries.



In this book, we will depict the rise and flowering of molecular biology. We will not attempt an exhaustive history of the field, nor of those scientists who built it. Instead, we shall concentrate on the development and flow of ideas. We would like to demonstrate the complexity of science, the sudden breakthroughs following decades of confusion, the frequent blind alleys of misconception that

tend to hinder progress. We would like to show how some ideas are slowly crafted by teams of careful and dedicated workers, whereas others arise from individual strokes of genius.

Finally, while this is a book about science, we will try to avoid esoteric knowledge and extensive detail, either about scientific procedures or about the scientists themselves. Nevertheless, there is much about those remarkable men and women who created this field that demands telling, and we shall include biographical material where appropriate.