

PREFACE

In recent years there have been many advances made in the field of bioscience research. This progress has been driven by parallel advances in methodology. New and minor modifications to existing techniques can propel and enhance scientific investigation. However, the use of any procedure can only be advantageous if there is an appreciation of the basic principles, requirements, benefits and pitfalls of the techniques employed. This is true for both experienced as well as novice investigators.

We have been teaching in the HE sector for the past 20 years. During this period we have become increasingly aware that newly enrolled students are struggling to appreciate the basics of laboratory techniques and data analysis. Although the reasons for this are many fold, a sound platform for scientific investigation is still dependent upon the understanding and correct use of basic bioscience laboratory techniques. Our students perceive that there is a lack of appropriate support in the literature. With this in mind, the rationale for this book is to supply you (students) with an easy to use reference book that will provide you with a basis for understanding the basic bioscience techniques that you will come across in your HE studies.

The book provides the foundation of many basic laboratory techniques, worked examples of common calculations and (we hope) helpful tips. We wanted the book to be used prior to, during and after laboratory classes, which is why it is designed to fit into the pocket of a laboratory coat. The content reflects the size constraints and accompanying material will be available on a companion web page. In addition, supplementary reading will be needed to provide more detailed information on the techniques covered. However, we believe that the book will be of benefit to students starting their degree courses in any biosciences theme. The techniques covered in this book will be encountered by you repeatedly during laboratory sessions and we hope that the book will remain a valuable reference text throughout your degree course.

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