

Preface

Most educators today agree that students who are actively involved in the learning process will master a subject more thoroughly and meaningfully and will tend to retain the information for longer periods of time. Our goal in preparing this compilation of genetics and molecular biology practice problems is to stimulate active student learning of this vitally important and intensely interesting area of modern experimental biology.

In each chapter we have included a variety of problems meant to stimulate critical analysis and interpretation of data. Each chapter has a section devoted to more challenging applications of genetics principles and a set of questions amenable to analysis by students working in cooperative groups. The solutions to all the problems are presented at the end of each chapter. Explanations are included to provide a positive and encouraging starting point for students who may not have encountered these particular applications of genetics principles.

We hope that students of genetics use this book as an opportunity for review and practice. Only after working on a problem for a while, consulting your textbook, and writing down an answer should you consult the solution. As with most things in life, the learning occurs when your mind is engaged in the struggle to find a solution. We hope you enjoy solving the problems in this book and thereby come to appreciate the power and beauty of genetic analysis.

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David Matthes