

PREFACE

This book is an outgrowth of the George Fisher Baker Lecture series presented by one of us (C.R.C.) at Cornell University in the fall of 1992. This author is tremendously grateful to all those at Cornell who made this occasion truly memorable, personally, and most productive, intellectually. Included especially are Jean Fréchet, Barbara Baird, John Clardy, Jerrold Meinwald, Fred McLafferty, Benjamin Widom, David Usher, and Quentin Gibson, among many others. He also wants to express great thanks to Rick Bourke, who, several times provided extraordinary help, without which lectures would have been missed or required rescheduling.

The book also builds in part on the research experience of both authors over the past 15 years. Without the help of numerous talented co-workers and collaborators, we would never have achieved the accomplishments that form some of the work described herein. No book is produced without heroic efforts on the part of support staff who handle endless chores, even in this era of efficient word processing. We are especially grateful to Michael Hirota for hours of patient deciphering of handwritten scribble. A major part of the effort in completing any substantial publication is receiving and dealing with constructive criticism from those who have read early drafts. Joel Graber and Chandran Sabanayagam helped with the illustrations and many other details; Scott Downing, Foual Siddiqi, and many others used preliminary versions as a textbook in courses over the past few years. To them we owe our thanks for taking the time to reveal ambiguities and painful lapses in our logic. Correcting these has, we hope, made the book far more accurate and comprehensible.

Inevitably in a fast-moving field like genome research, parts of this book were out of date even at the time it was submitted for publication. Furthermore, like many books based on a lecture series, this one relies too heavily on the authors' own work to provide a truly fair representation of many parallel or competing efforts in the field. No attempt was made to be comprehensive or representative in citing sources and additional readings. Despite these limitations, by concentration on fundamentals, the authors hope that a vast majority of workers in the field will find this text a useful companion.

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