Preface and Introductory Remarks

This book has developed from my experiences teaching undergraduate physiological psychology at the University of Oregon. The earlier edition has been thoroughly revised and enlarged to consider some topics not previously treated. Also, I have added an extensive glossary, in response to student comments. In the preparation of both the original edition and this revised edition, I have learned a great deal from my students about presentation of scientific material, and I am grateful to them. Hopefully, this book reflects some of these things.

Most students using this book will not be psychology or biology majors. I have kept this fact in mind, and this book is oriented toward general liberal arts undergraduates, regardless of their specialties. Naturally, some topics may be more readily grasped by students with a previous background in either biology or psychology, but I have assumed only a high school background in biology on the part of prospective readers. In my experience, even that background is not necessarily essential to understanding.

The primary focus of this book is on behavior, particularly human behavior, and on the ways in which the nervous system and the closely related endocrine system interact in producing behavior.

Modern human beings are the result of both physical and cultural evolution, and to understand our own behavior more fully, it is help-

ful to understand our biological heritage. While this is the approach taken in this book, it is well to keep in mind that cultural and family influences also profoundly affect our behavior.

The material in this book reflects a point of view that draws on many other disciplines including anatomy, physiology, biochemistry, experimental psychology and the study of animal behavior. There is, currently, a quite vigorous field developing out of this mixture. It goes by different names, such as psychobiology, biological psychology, or physiological psychology. The research of the past few years, while producing a rapid, almost explosive growth of new information, has largely served to demonstrate how fragmentary our knowledge of brains, hormones and behavior really is. This is a very incomplete and occasionally disorganized field of study. While this is frustrating to some students who wish to know "the final truth" (and who, of course, are destined to be forever disappointed) I have found that the great majority of students find the incompleteness more a challenge than a frustration.

There are, of course, many topics which are covered only briefly in this book, and some others which are not covered at all. Hopefully, there will be topics which stimulate your curiosity to search out more complete discussions. For this purpose, recommended readings are provided at the end of each chapter, and still other references can be found at the back of the book.

In the preparation of the second edition, I have benefitted from the comments of several individuals, and I would like to acknowledge them here. I wish to thank Elliot Blass, Ruth BreMiller, Julian Davidson, Alan Epstein, Barbara Gordon, Steve Keele, Reeva Jacobson Kimble, Daniel Kripke, Marvin Lickey, Richard Marrocco, June E. Millet, Charles Noback, Mark Rosenzweig, Roger Sperry, and William Uttal. I would like to thank Barbara Platz for typing the manuscript. I would also like to thank my friends at Goodyear Publishing, particularly Sue MacLaurin.