hand, the special features of human genetics were treated at length, though in as non-mathematical a way as I could contrive." Thirty-eight years, six editions, and one coauthor later, the aim of the text remains the same: to present the basic principles of genetics as they apply to medicine.

The book opens with a brief chapter on the basis of inheritance. The authors then systematically work through each conceivable mode of inheritance. The discussions of single gene and multifactorial inheritance are exceptionally detailed. No mating type is overlooked. Every possible outcome is considered. So many possibilities are discussed that one is often obliged to go back and sort out exactly what was previously said about the topic.

Some of the specific areas of human genetics which are discussed are molecular genetics, the genetics of blood groups and HLA, linkage, chromosomal abnormalities, and genetic counseling. Each chapter deals with its subject concisely but adequately. The emphasis is consistently on the basic principles pertinent to the topic.

The illustrations are generally good. Some karyotypes are unbanded and should be replaced by banded ones in the next edition.

Several features of the book are outstanding. The table of contents is set up in such a way that it provides a handy reference to specific situations. For example, the reader can easily determine from the table of contents that a mating of two heterozygotes for a dominant trait is described on page 32. Additionally, the text provides a broad base of background information, and suggestions for further reading are well selected.

The book is recommended for physicians, medical students, and graduate and undergraduate students, including those with little or no background knowledge of medical genetics. However, a word of caution is in order. The authors deal almost exclusively with the application of genetics to medicine, so the reader will get far more from the text if he first acquires a background understanding of genetics in general.

As a genetics associate, I also recommend the present edition of this classic text for genetic associate training programs, since it presents a broad and accurate approach to medical genetics.

RICHARD C. WAGNER

Southwest Biomedical Research Institute
and The Genetics Center
Tempe, Arizona

Cardiomyopathy Associated with Systemic Myopathy. Genetic Defect of Actomycin Influencing Muscular Structure and Function. By F. BÜCHNER, S. ONISHI AND A. WADA. Baltimore/Munich: Urban and Schwarzenberg, 1978. Pp 99. $18.50.

The title of this monograph describes the content, *except* for one major item: it has to do with golden hamsters.

In 1962, the golden hamster was found by Hamberger et al. to have a hereditary form of cardiomyopathy. The disorder affects skeletal and cardiac muscle. In 1968, by crossbreeding siblings of affected hamsters, Eörs Bajusz was able to develop a stock with the disorder. Bajusz, working with the authors and using electron microscopy, then discovered an embryonic defect in the formation of actomycin. As the first author writes in the preface, Bajusz was an ardent researcher whose "passionate heart was called to eternal rest" in 1973. This book is dedicated to the memory of Bajusz.

This reviewer could quibble with the awkward phrasing which occurred when it was translated from the original German, and other matters such as reference citations to papers not contained in

the reference list. However, the book is a well-organized, superbly illustrated monograph on a genetic disease of striated muscle.

The disease may be a valuable model. Duchenne-type human muscular dystrophy affects both skeletal and cardiac muscle and is an embryonic disorder; the progressive tardive (Becker) form of muscular dystrophy also involves muscle and heart. Bajusz' myopathy has its parallels in man.

In recent years, research on hereditary muscle diseases has tended to flag, so we still know little about its pathogenesis. This monograph may serve to spur on timely research in man and so is recommended to workers concerned with genetic diseases of skeletal and cardiac muscle.

FREDERICK HECHT

Southwest Biomedical Research Institute
and The Genetics Center
Tempe, Arizona

Down Syndrome: Growing and Learning (Human Potentials for Children Series). By SIEGFRIED M. PUESCHEL, CLAIRE D. CANNING, ANN MURPHY AND ELIZABETH ZAUSMER. Mission, Kansas: Sheed Andrews and McMeel, Inc., 1978. Pp 173. $8.95 (cloth). $4.95 (paper).

This is a book for parents of Down syndrome children, their relatives, and friends. It is an unusually personal book. Two of the four authors "have been personally touched by Down syndrome." The opening chapter, "From Parent to Parent," is by Claire D. Canning, mother of an affected child.

The book has two themes: one is the reaction to (and acceptance of) a Down syndrome child; the second is the development of that child. The two themes are interwoven with skill and feeling.

The reactions to a Down's baby are those of mourning. This is not new, but it is reassuring to know we all go through analogous patterns of feeling after the birth of a defective child.

The development of the Down syndrome child is excellently described. Table 1 lists the ages (average and range) at which Down syndrome children pass the usual developmental milestones of smiling, rolling over, sitting, crawling, standing, walking, and talking, first in words, then in sentences.

Practical suggestions for early developmental gross and fine motor stimulation are provided. Optimal school and community resources are emphasized as being needed by the child, and adolescence, vocational training, and the final parting from home are discussed. These reviewers have seen several thousand children with Down syndrome and find that this book deals with most of what happens after a Down syndrome birth.

Some situations are not adequately discussed, such as the extraordinary pain felt by high-achieving, late-procreating parents with over-inflated self-images who have produced a Down syndrome child. Additionally, there are no discussions or suggestions of how to compensate for inadequate community resources when the family lives in a tiny, isolated community such as Gila Bend or Wolf Hole, Arizona.

The book contains informative photographs of Down's children at home and at school. The graphs and line drawings, however, are amateurishly drawn, and the karyotypes are badly reproduced. No index is provided. These flaws should be remedied in a future edition.

This book, nonetheless, nicely complements *The Child with Down's Syndrome* by David W. Smith and Ann A. Wilson (W. B. Saunders Co., Philadelphia, 1973). Both books should be on