an introduction into cytogenetic nomenclature. The book is easy to read and to understand. The main points are explained with the help of diagrams and instructive illustrations that should be particularly useful to inexperienced readers. The major strength of the work is that it covers almost all potential situations that could emerge from cytogenetic examinations and that would require explanation. The citations are up to date and include mainly the most recent publications relevant to each topic.

There are obviously some points that can be criticized, and there are others that are a matter of different opinions. This reviewer would not have included the fragile X and the "chromosome breakage" syndromes, since (*a*) they do not represent chromosome aberrations sensu stricto and (*b*) their diagnosis is nowadays exclusively or predominantly performed by molecular-genetic methods. On the other hand, submicroscopic deletions that are true chromosome aberrations, such as the 7q11.2 deletion in Williams-Beuren syndrome and the 22q11.2 deletions associated with different phenotypes, could have been described in much more detail. The authors are extremely cautious in their risk figures—they tend to quote the maximal (highest) recurrence-risk figures that are reported in the literature, often, however, without considering strong ascertaining biases. Thus, in some instances the risk figures are almost certainly too high (e.g., 9.4% for abnormal phenotype in de novo balanced inversions). The impact of both parent of origin and mechanism of formation of numerical and structural chromosome aberrations, in regard to genetic counseling, is not considered to the extent that it deserves. Mitotic nondisjunctions and structural aberrations due to meiotic crossovers would not implicate an increased recurrence risk at all. The chapter dealing with uniparental disomy is not exhaustive and does not adequately consider the difference, between heterodisomy and isodisomy, in the risk of abnormal offspring due to homozygosity of recessive mutant genes in the latter, but not in the former, situation. More important, there is a major lack of detail concerning techniques at least some of which nowadays are indispensable for a modern cytogenetic laboratory, techniques such as FISH, chromosome painting, chromosome dissection, and reverse painting. The separation of the genetic-counseling section from the chapters describing the particular aberrations makes it sometimes difficult and too boring for the reader to find what he or she is looking for.

However, these are all shortcomings with which one can live. The book, by Gardner and Sutherland—and this should be stressed—is very useful and should become a must for every cytogenetic laboratory that provides a genetic-counseling service.

ALBERT SCHINZEL

Institut für Medizinische Genetik
Zurich

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Molecular Biology Made Simple and Fun. By David P. Clark and Lonnie D. Russell. Vienna, IL: Cache River Press, 1997. Pp. 470. $34.95.

Molecular Biology Made Simple and Fun starts off with two sound bites. The authors provide a quirky translation of Jacques Monod's famous, brazenly reductionist dictum "What is true of *E. coli* is also true of the elephant." Then, in the margin of the first page, we read: "Roses are red / Violets are blue / Molecular biology / Is easy for you!" Leafing past these, I wondered, not for the last time, exactly what readership the authors had in mind when they wrote this very odd introductory text. The tone of the writing and the groan-inducing quips and cutesy cartoons that are found on nearly every page suggest that they want to reach a preteen audience. The content would make this an adequate text in an introductory college course—say, a first-year course on molecular biology, directed at nonmajors.

The book features brief but competent discussions of replication in retroviruses, the distinction between lysis and lysogeny, the genetics of apoptosis, and the generation of antibody diversity. Along the way, the authors provide commentary, such as "Yee-hah!" (p. 94), "Life sucks!" (p. 318), and "Wow wo woww wow woow!!!!" (p. 364). Still, some of their banter really is well done and could be useful in teaching. For instance, in the discussion of cloning the deleted gene in Duchenne muscular dystrophy, we read: "Huh?! How do you clone something that is not there?? Actually you do need a sample of DNA from a healthy person, too. It's done like this . . ." (p. 181). I recall puzzling over this point once, and I certainly would have appreciated an explanation as lucid and accessible as the one that Clark and Russell provide. For these moments of insightful pedagogy, the book may be useful to some teachers. For those who need to reach a young audience—for instance, in a high school or junior high educational outreach program—this may be the perfect resource. For most others, I think the jarring inconsistency between the tone and the content would only distract.

An introductory book that I would recommend to anyone interested in the concepts of Mendelian and molecular genetics is Gonick and Wheelis's *Cartoon Guide to Genetics*. This long-time favorite was revised a few years ago to include some updated information on split genes and some insights into biotechnology as a business. This is a book to suggest as a supplementary text for a college course or to give to a precocious ten-year-old or to relatives who wonder what you work on. Little of the detailed information in the Clark and Russell book is found here, but the writing is lively and engaging, the illustrations are charming, and the jokes are funny.

JOHN ASHKENAS

The American Journal of Human Genetics
University of Washington
Seattle

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