

Basic Sciences in Ophthalmology, Physics and Chemistry.

Authors: Flammer Josef, Mozaffarieh Maneli, Bebie Hans (2013)

ISBN 978-3642-322-600 Springer

Shiri Diskin¹

Received: 12 May 2015 / Accepted: 14 May 2015 / Published online: 28 May 2015
© Springer-Verlag Berlin Heidelberg 2015

Springer has initiated a series of books linking ophthalmology to its basic science roots. While some practicing clinicians may find this type of reading a burden on their schedule, I am of the opinion that physicians remain scientists throughout their professional lives and never stop learning. Having such a basic reference resource can remind the reader of the fundamental principles and mechanisms underlying the information acquired during one's everyday heavily-practical reading.

The book is the first in the series and declares itself to focus on physics and chemistry, although there is a lot of biology as well. It covers very basic information that doctors will have learned during their school years, but it does so in a very communicable and reader-friendly manner. Every chapter presents the basic science with specific emphases on topics that are of interest to ophthalmologists, using ex-

amples from the world of ocular health. The text is accompanied by beautiful, concise illustrations (by Natasa Cmiljanovic, Rebekka Heeb and Peter Rüber) that are of great value in conveying the main points.

I found the chapters about DNA, RNA, and proteins to be truncated, in that they stop short of the new advances in understanding of the roles of these molecules in the processes of disease and therapy. There is no mention of sequencing methods, of whole "ome" (i.e., genome, exome, proteome, etc.) analysis techniques that are now the staples of biomedical research in every therapeutic field.

It is unfortunate that this book lacks any references. It is, of course impossible to cite every source of information, or this book would be double in size, but there are no references at all, apart from some figures that were reproduced from other sources. To me, this is a glaring omission. A minor stylistic criticism is the use of anthropomorphism (ex.: "Nature has provided these basic mechanisms to allow..."). It can be said that this is compatible with the book's friendly tone, but in my opinion this is not the best stylistic choice for a scientific publication.

In all, this is a book worth having and consulting when you wish to be reminded of the fundamentals, but there is room for improvement in the next edition.

✉ Shiri Diskin
Shiri.Diskin@ScienceWriteRight.com

¹ 38 Golomb st. Apt. 3, Ramat Hashron 47207, Israel