

Life at the Cell and Below-Cell Level. The Hidden History of a Fundamental Revolution in Biology

by Gilbert N. Ling, Ph.D.

> Pacific Press 2001

Answers to Readers's Queries (Read First!)

The in-depth and extensive experimental confirmation of the essence of the physico-chemical theory of life, which this volume embodies, marks the beginning of a new era in biology (See Preface). To participate in this ex-citing adventure, however, one needs certain simple basic knowledge of biology as well as of physics and chemistry. For some, all the required knowledge may be old hat; for others, part, or even all of it, may not be. Since neither the required basic biology nor the required basic physics and chemistry is difficult to master, for those who need it, this volume provides an easy, do-it-yourself course centered around an attached customized dictionary which I call a *Super-Glossary*. This *Super-Glossary* will answer all the questions a reader is likely to raise and thus enable him or her to move ahead without difficulty. A guideline for this self-teaching course is given in the form of answers to questions raised by several readers.

(1) Is there some specific order that you recommend for a first-time reader?

Answer: Yes. For the first reading, I recommend that you start with the Epilogue (Chapter 17) at the end of the text, followed by the Summary Plus (Chapter 16) and then the Preface. This way you will start with a perspective for what is to follow. After the Preface, read this *Answer to Readers' Queries* once more before starting to read the main text.

(2) What can I do if I get stalled on a word or a concept but cannot find it in my dictionary or textbooks I have?

Answer: Make a light pencil mark on the incomprehensible item and leave a stick-on tag on the page on which it is found. And then read on until you come across another "roadblock." Repeat the same procedure—again and again—until you feel that you have covered enough pages for this time. Stop and consult the *Super-Glossary* on p. 288 near the end of the book, which contains more than 900 (and thus virtually all) the technical words, terms, basic concepts etc. used in the writing of this volume. Again, make light pencil marks, this time on the incomprehensible items in the *Super-Glossary*. Armed with the explanations of the incomprehensible items, read the sections they appear in once more before moving forward again. If you follow this suggested routine, obviously you won't get stuck anywhere for any length of time (and thus become discouraged and stop reading.) The pencil marks and stick-on tags will also make the book a part of you and the next reading will be easier, until a full and complete understanding is achieved. In addition, you will be practicing a basic step of *self-education*—a vital skill if you plan to venture into totally unexplored new realms of knowledge in the future.

If even the *Super-Glossary* cannot offer you the answer to the question that puzzles you, explain to me your problem *via* an e-mail to **gilbertling@dobar.org** or a regular letter (110 Marcus Drive,

Melville, NY 11747). I will try my best to respond to you as soon as possible and will thank you for helping me to launch a better *Super-Glossary* in the next edition of the book.

(3) Where can I find help if I come across an abbreviation like LFCH a second or third time but cannot remember where I first saw the one with an explanation attached, nor the explanation?

Answer: There is a *List of Abbreviations* (on p. 330 just after the *Super-Glossary*) where all the abbreviations used in the volume are listed and explained. The *Subject Index* may also be helpful.

(4) If I want to pursue further a subject mentioned in the book, can I find the original article in which the finding was first described?

Answer: Yes. A *Bibliography* with more than 550 single or multiple references is provided. The references are cited as superscripts in the text with the reference number followed by a page, figure or table number as the case may be. The information should guide you to the original article. For articles originating from my laboratory, you may send me a request card identifying the article. I will send you a reprint if I still have one.

(5) What does Appendix 1 contain?

Answer: In *Appendix 1*, I have gathered together most of the equations in one way or another related to the content of the book. Familiarity with them is not necessary for the mastery of the book, but may be of interest to those wishing to know more.

(6) What does a symbol like [14.3(2)] stand for?

Answer: [14.3(2)] means subsection 2 under section 3 of Chapter 14. One easy way to locate it is to consult the *Table of Contents* and find the number of the page on which this specific subsection is located. The Chapter number indicated on the upper right comer of each right-hand (recto) page may also be helpful.

(7) I noticed that the legends to the figures and tables are often much longer than in an ordinary scientific article. Is there a specific reason for these lengthy legends?

Answer: Yes. Each legend has been expanded from the one originally found with the figure or table. More details are added to make the text presentation as short and succinct as possible.

(8) In what way can I benefit from the List of Figures, Tables and Equations?

Answer: In this volume, a figure (or table or equation) first introduced, say on page 10, may be referred to again and again on pages farther beyond. The List of Figures, Tables and Equations on p. 333 gives you the number of the page where that specific figure is presented (the first time) and thus saves you time and effort in locating that figure (or table, or equation).