W.C. Marquardt, R.S. Demaree, R.B. Grieve: Parasitology and Vector Biology. *Second edition. Harcourt Academic Press, San Diego - London - Boston - New York - Sydney - Tokyo - Toronto 1999, ISBN: 0-12-473275-5, hard cover. 400+ photos and drawings, 702 pp. US Price: $84.95, Europe: £51.95*

The authors, well known parasitologists from Colorado State University (WCM, RBG), California State University (RSD) and Heska Corporation (RBG), dedicated this book to Dr. Norman D. Levine, who influenced not only American protozoologists, but parasitologists throughout the World and, in my opinion, this influence can be found in this outstanding textbook.

It is a comprehensive introduction to human and animal parasitology. It provides basic information on the biology of agents such as protists, worms, and arthropods, but it also emphasises how control programs can be structured in a sociological, political, and economic milieu. Students and researchers alike will appreciate the added coverage of the molecular aspects of parasitology in this new edition. The main reason why to recommend it to students of parasitology, biology and medicine is the consistent, logical organisation that will allow them ready access to all problems concerning parasites.

The textbook is organised into 5 parts and 51 chapters. The first chapter concerns general parasitology and all others are devoted to certain groups of parasites: 15 of them in Part 1 (Eukaryotic Protista), 8 in Part 2 (Platyhelminthes), 12 in Part 3 (Nematoda), 4 in Part 4 (Acanthocephala, Nematomorpha, Annelida, and Pentastomida) and 11 in Part 5 (Arthropoda). I was rather surprised by the conservative approach of the authors to the zoological system and although they know new data about molecular biology that changed the systematic position of some groups, they placed them into traditional positions (e.g. Myxozoa, related to Cnidaria, were placed in the same chapter as Microspora, and Pentastomida, belonging to Crustacea, were not placed in the Arthropoda part but together with Annelida, Nematomorpha and Acanthocephala). A similar case is also the system of individual groups of protists used i.e. although modern protistan classification according to Corliss (1994) is used in the introduction Chapter 2, later, in Chapter 8 we can find all unrelated genera of amphizoic amebae together. In the same way, *Giardia duodenalis* (sic! – I do not know why authors prefer this synonym instead of valid *G. intestinalis*) is placed in one chapter with *Trichomonas vaginalis* etc. Such conservatism is usually accepted due to educational reasons and it is believed that grouping animals into traditional groups could help students to remember them. I would prefer inclusion of new knowledge into textbooks as soon as possible, especially if it is widely accepted by the scientific community (i.e. the polyphyletic origin of the so-called Cnidospora group or relations of pentastomids to Crustacea). Apart from these differences in opinions, I recommend to include this book in the list of literature for courses of general and medical parasitology. The main reason being the presence of text essays that provide interesting material not usually included in books, such as how parasites are studied, and that should raise students' interest in the subject. Those essays are the main features that make this book different from similar textbooks. They are well separated from the main text (black frames) and are extremely useful for keeping the reader's interest. One can learn how parasitologists 70 years ago were able, without molecular techniques to distinguish the pathogenic *Entamoeba histolytica* from the commensal *E. dispar* and how a focus of leishmaniasis was surprisingly discovered in Texas. Essays on the necessity of performing parasitological surveys, interesting data about introducing chemotherapeutics, antibiotics and vaccines into medicine and fascinating details concerning the mechanisms of pathogen transmission in mosquitoes and blood volumes taken by single groups of haematophagous insects are other examples. Moreover, one can read an interesting story about how mosquitoes travel between continents using old tires or learn the mechanism by which the female mosquito detects that the quantity of blood taken in has reached the optimal amount and that it is time to quit!

The majority of more than 400 pictures (mostly black and white drawings, photomicrographs from light and electron microscope) are of good quality. I miss the scale or the magnification of the photomicrographs. In the advertisement for this book, it is claimed that illustrations and drawings allow the subject matter to come alive. It is only the partial truth as most of the illustrations are reproductions from other publications and are of varied quality. The pictures of human malaria inserted into colour plates are helpful; however, their black and white reproductions on page 195 are poor and this repetition is useless – just a waste of space.

An important advantage of the text is in consideration of control of parasitic diseases in biological, social, and economic contexts. Good examples are chapters devoted to the relation of malaria to genetic changes expressed in blood cell alterations and to the control and eradication of malaria from history to future perspectives.

Keyed and difficult terms are defined in an extensive glossary (almost 7 pages) and an even more extensive index serves for better orientation in the text.

Each chapter has an appropriate list of related recommended literature ("readings"), where, as usual in books by American authors, mostly American publications are quoted.

My last critical comment is aimed at spelling mistakes, especially in scientific names of parasites and their hosts i.e. *Acanthamoeba culbersoni* instead of *A. culbertsoni* (p. 121), *Syrlcerus caffer* instead of *Syncerus* (p. 220), *Theilieria* instead of *Theileria* (p. 224), *Encephalitozoon hellum* instead of *hellem* (p. 235), *Enterocytozoon bienusi* instead of *bieneusi* (pp. 235, 236) *Cyclospora cayatanensis* instead of *cayetanensis* (pp. 156, 157) *Bulineus* instead of *Bulinus* (p. 271), *Felis **bengalis*** instead of *bengalensis* (p. 166), *Lymnaea tumentosa* instead of *tomentosa* (p. 277), *Lymnea* instead of *Lymnaea* (p. 271), *Borellia* instead of *Borrelia* (pp. 675-679) and many others. Similarly, names of plants used in therapy are misspelled as well (*Dryopteris felix mas* instead of *D. filix-mas*, p. 322). In my opinion, such mistakes in textbooks can have unpleasant consequences and students can fix them in their minds. Nowadays, very sophisticated software enabling authors to avoid such keying mistakes is available and should be used.

Except for these mistakes, the benefits predominate and the book undoubtedly will become an invaluable source of rich information for students as well as specialists in many parasitological fields.

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