Atlas of Human Parasitology, 5th Edition
By Lawrence R. Ash and Thomas C. Orihel

Chicago, IL: American Society for Clinical Pathology Press, 2007. 540 pp., illustrated. $200.00 (cloth).

Each edition of Ash and Orihel's Atlas of Human Parasitology gets better and better, and this enlarged, beautifully produced fifth edition witnesses a complete revamp of the previous edition, incorporating new material and updated references while retaining its familiar style. The 5 main sections cover the protozoa, helminths, arthropods, and pseudoparasites, plus artifacts and procedures. The protozoa section begins with a general account of the parasitic protozoa and an illustrated quick key to the human intestinal parasites, followed by detailed accounts of each of the species listed; this pattern is also adopted for the section on helminths. The photographs, which often show the results of different staining techniques, are superb, and the breadth of microscopical field for the protozoa and the depth of field for the helminths and arthropods approach perfection. Many of the illustrations would qualify for photographic prizes. In addition, the amount of text is just right, providing enough information to be really useful while not providing so much detail that the reader becomes confused. The 4 quick keys to human intestinal protozoa, helminth eggs, filariiform larvae in fecal culture, and microfilariae are extremely useful. They should, however, be used with caution by relatively inexperienced health care workers, because, as is always the case with keys, an early mistake can lead the reader very much astray. I know my way around this subject, but even I made a couple of mistakes through sheer carelessness. My advice would be to use the key as a starting point and then repeat the process with a fresh eye. The authors have deliberately omitted sizes from the illustrations, which I think is a pity, but they have compensated for this in the most important area, helminth eggs, in the overview of helminths. Perhaps there might be something similar for the intestinal protozoa in the sixth edition.

One of the most intriguing chapters is devoted to artifacts and pseudoparasites. These are topics that are rarely covered elsewhere and are becoming increasingly important as people turn to Web sites and self-diagnosis and as they or their physicians submit real or imagined body products to diagnostic laboratories. Turning to diagnostic procedures, the coverage is comprehensive and illustrates how much this field has changed over the past quarter century. Again, inexperienced readers will require guidance in the choice of appropriate technique, because the simplest procedure is often the best, and some of the more complex procedures are only required for specific purposes. I would have liked to have seen a diagram showing how to prepare a thin blood film, because this is something that is becoming less frequently taught and, unless one knows how to do this properly, no amount of skill in staining the blood will compensate for a poorly prepared film.

It seems a pity to carp a little, but the classification of the parasitic protozoa is very out of date and is out of kilter with the classification of free living protozoa, particularly with regard to the microsporidians. There is now no doubt that these are fungi, which the authors rather grudgingly acknowledge. Having accepted that Pneumocystis is a fungus and that Blastocystis is not a protozoan, it is time to accept that, although all 3 groups are no longer parasites sensu strictu, they can be regarded as “honorary parasites.” This might make the sixth edition even easier to use than the fifth and would warrant the inclusion of specific staining techniques for these organisms, which would also be useful for the odd fungus that might turn up.

The fifth edition of Ash and Orihel’s Atlas of Human Parasitology retains its supremacy in its field and is not only essential for any laboratory concerned with the diagnosis of parasitic infections but is also a superb teaching tool and ancillary textbook of parasitology for undergraduate and postgraduate courses. It is difficult to recommend it too highly.

Francis E. G. Cox
Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, United Kingdom

Antisepsis, Disinfection, and Sterilization: Types, Action, and Resistance
By Gerald E. McDonnell

As noted in the preface, Antisepsis, Disinfection, and Sterilization: Types, Action, and Resistance was developed to provide the reader with a “basic understanding of and reference for the various types, modes of action, and mechanisms of resistance of antiseptics, disinfectants and sterilants for students of microbiology, chemistry, infection control, contamination control,