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Review of Parasites: A Guide to Laboratory Procedures and Identification

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Parasites: A Guide to Laboratory Procedures and Identification

*by Lawrence R. Ash and Thomas C. Orihel
American Society of Clinical Pathologists/
Raven Press, 1987. US\$50.50 (xxii + 328
pages) ISBN 0 89189 231 1*

Good guides to laboratory procedures and parasite identification are important. Unfortunately, not all such guides are good. This one is excellent, and represents a valuable new resource that should be in any laboratory providing diagnostic medical parasitology services. It is a complete compilation of diagnostic parasitology procedures. The format is logical and the text is thoughtful, making the book both easy to use in the laboratory and informative as a reference.

Part I of this two part book gives a stepwise description of laboratory procedures for obtaining, preparing, and examining parasitological specimens of every description, with numerous helpful line drawings. Formulas for reagents are provided, and the utility and limitations of each procedure are described. The authors also provide many useful hints and suggestions which cannot be gleaned from standard parasitology laboratory manuals. For example, the authors warn us that unfertilized *Ascaris* eggs will not float in standard zinc sulphate solution. Several useful chapters close Part I, including procedures for AIDS-related infections, parasite culture and animal inoculation, serodiagnosis, preparing parasites for study, and quality control and laboratory safety. This content is largely absent in standard laboratory manuals.

Part II is titled 'identification and diagnosis', but it is more than a description of diagnostic morphological characteristics. The authors detail diagnostic features in the context of laboratory procedures and point out the method of choice among these. This approach permits diagnosis from the available preparation and provides the best preparation when the diagnosis is suspected beforehand. There is no tedious organism by organism description of morphological characteristics, but the key features are listed for each group and then illustrated both in line drawings and high quality photomicrographs. Finally, organisms likely to be in the differential diagnosis, including non-pathogenic commensals, are described in tables. This saves the reader from wading through what would be difficult text. Keys to identifica-

tion of some helminths are free of the esoteric morphological features common to the usual taxonomic keys found in many manuals.

The chapter describing artifacts is not illustrated. This is a surprising omission in a book of this scope. The authors describe distinguishing features, but without illustrations it is difficult to appreciate the sometimes remarkable resemblance to true parasites. The problem of artifacts confusing the intended reader of this book probably merits greater detail than is afforded. Nor will this book be useful to anatomic pathologists faced with identifying a parasite in tissue section. Such diagnoses require specialized training and knowledge and it was appropriate to exclude these procedures. But a useful table guides the reader to pertinent literature on this subject.

The spiral binding and rough paper emphasize the intended use of the book as a benchtop laboratory manual. A hardcover printing with quality paper would be a service to those using the book as a reference text. The content and scope is consistent with both uses.

In brief, this is an outstanding laboratory manual and reference book, and should perhaps replace other manuals of medical parasitology procedures presently on the laboratory bookshelf.

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