

BOOK REVIEW

Manual of Clinical Laboratory Immunology, Sixth Edition

EDITED BY NOEL R. ROSE

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If meaningful data must be obtained to help the physician diagnose or treat an illness, reliable and robust analytical methods are essential. Because of their high specificity and sensitivity, immunological assays provide the clinician with a plethora of highly useful data, from determination of blood group to detection of latent infections to answers to forensic questions. Performing a diagnostic test is one thing; interpretation of its results is another. Evaluation of results obtained from a diagnostic test requires the researcher to have a sound understanding of the methods underlying the working principle of the test as well as an appreciation of its limits. This is where the *Manual of Clinical Laboratory Immunology* steps in. The impressive 143-chapter treatise supplies clinical and basic researchers who employ immunological assays of almost any kind with the necessary theoretical and practical knowledge to succeed and avoid pitfalls.

Techniques from the most basic to the latest experimental wizardry such as microarrays and anticancer vaccination—technologies that are very much in their infancy, yet may make a lasting impact in the clinical setting in the near future—are covered. By just sifting through the *Manual of Clinical Laboratory Immunology*, one is left with the impression that this tome leaves its owner little more to be desired. “Comprehensive” is the one word that springs to mind if one tries to characterize this book as concisely as possible. A more thorough look at the manual’s contents confirms the first impression. Those of us who have all but forgotten the physics training we were given all too long ago will get a short refresher on the atomic principles, on fluorescence for example, before diving into the sea of fluorescence-based immunological assays. Phenotypic assays allowing the characterization of cells get as much room as do functional assays, endowing the interested reader with the means to follow the immune system’s reactions. Four hundred pages are devoted to the detection of infectious diseases, making the possession of the *Manual of Clinical Laboratory Immunology* a must for medical microbiologists.

The reader gets not only the principles and possible applications of any method discussed in the *Manual*, but also enough practical, hands-on information for carrying out the actual experiment. A wealth of practical information such as buffer compositions and related information, including an uncounted number of full protocols, is given throughout the book, so that the *Manual of Clinical Laboratory Immunology* may well be used directly at the bench. Its true value, however—in the reviewer’s eyes—is as a master reference in any clinical (and basic) immunological laboratory. Here is where the *Manual of Clinical Laboratory Immunology* excels. If you have one copy of it, and it is sitting on a person’s benchplace, he or she will probably be annoyed by someone else who also wants to use it. People working at the bench as well as those mostly working at the desk will profit immensely by consulting this manual. Individual protocols, selected on the basis of anyone’s needs, will probably find their way to the bench as photocopied pages. The *Manual* is designed for the initiated; it targets an audience at the graduate and postgraduate levels. Because of its awesome breadth and scope, the *Manual of Clinical Laboratory Immunology* is second to none. Because it is destined to be consulted on a frequent basis, a book like this one ought to be enduring. Fortunately, the *Manual of Clinical Laboratory Immunology* is manufactured to high-quality standards. Given the mass of information it contains, it is a very good value for the price. While trying to find information related to your current work, you might well be lured to gather information on something different as well (or instead?). If you intend to work in a clinical immunological setting, make sure a copy of it will be at hand. If one of your colleagues leaves, make sure your lab’s copy is still there!

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