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Book Review

HIV Protocols.
Edited by Nelson Michael and Jerome H. Kim, Humana Press, 1999

For those involved in AIDS research, the comprehensive and well-organized HIV Protocols is a great companion to the more general laboratory protocol manuals. In this compendium of methods, Nelson Michael and Jerome Kim, provide an impressively up-to-date collection of laboratory methods for every common-and not-so-common AIDS lab experiment. Research on HIV involves contributions from a vast array of investigators from disparate fields of investigation, including virology, immunology, and molecular biology, vaccinologists and therapeutics researchers. HIV Protocols is an effort to cover all the bases and does so as admirably as a bound volume can.

The first section of the book centers on virologic methods and ranges from the long-standing methods of isolating and expanding HIV from cells and body fluids, to the more esoteric and newer cell-cell fusion assay to dissect HIV envelope interactions with its cellular receptors, CD4 and any of the appropriate members of the chemokine receptor family. Each method is accompanied by an introduction to orient the reader which refers to a provided list of cited literature, materials, experimental protocol, and a notes section where the authors provide those little 'tricks' so often necessary for successfully performing an experiment. For example, in the notes section for the neutralizing antibody assay, the contributors tell us that a specific plate carrier for a specific common centrifuge can be jury-rigged by removing the handle to accommodate microtiter plates used in the assay. In places where more than one accepted assay is used, such as the neutralization assay, multiple protocols are given. The other three sections of the book, Molecular Biology, Humoral Immunology, and Cellular Immunology are laid out as the Virology section is, and provide the same depth and breadth.

Perhaps the most difficult thing for a compendium like HIV Protocols to be is timely and up-to-date. While the editors have packed many relatively new procedures into this work, the shortcomings of the format are obvious. The most glaring example is the absence of a treatment on the tetramer assay which utilizes a novel reagent to stain T cells (first for CD8 cells and now CD4 as well) for a given epitope specificity. This has proved invaluable in the AIDS field to those studying the immune events immediately following initial infection try to delineate the nature of the HIV-specific immune response, and also to those analyzing the immunogenicity of candidate vaccine immunogens.

In spite of the flaw inherent in the format, HIV Protocols is a book no lab venturing into the world of HIV research should be without. Even laboratories whose expertise is AIDS research will benefit from having almost all important HIV assays in a single volume as a reference for use by new students and postdoctoral fellows, for example. Other protocol publications such as Current Protocols in Molecular Biology (John Wiley & Sons, Inc., publisher) have gone to a more dynamic format of a loose-leafed binder which can be easily updated. The publisher of that volume actually sells not only the book, but subscriptions to updates as well, and makes it all available in CD-ROM format. Given the electronic age we now find ourselves in, and the frequent necessity

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for more than one person to need to refer to such a work at the same time, it is very convenient for a working laboratory to have electronic access to such a useful collection of information. This format also lends itself to easy and frequent updating, which in the rapidly-moving field of AIDS research can be helpful. If HIV Protocols were formatted similarly, it would make an excellent methods book perhaps the best one on the subject. Not to mention, that you won't have to worry if a pesky coworker spills coffee on the protocol you need to see immediately...just print a new copy...

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