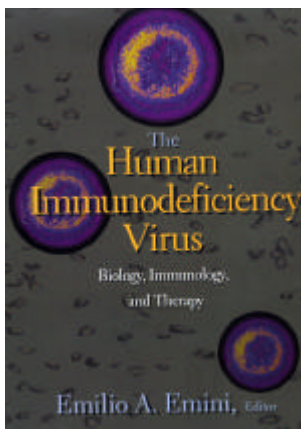


BOOK REVIEW



The Human Immunodeficiency Virus: Biology, Immunology, and Therapy
Edited by Emilio A. Emini

Princeton University Press,
2002, 450 pages (Hardcover)
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\$75.00 US

In the past twenty years, "Overwhelming" is probably the best all-encompassing word to describe the HIV/AIDS tragedy. AIDS has been overwhelming in its global spread; overwhelming, in its synergy with other infectious diseases namely, TB and malaria to cause human suffering; overwhelming in the devastating impact it leaves behind as the epidemic tears through the social fabric of developed and developing nations alike. Likewise, our collective effort to curb this pandemic has also been nothing less than overwhelming. In recent years, researchers have acquired a wealth of knowledge with respect to the biology of HIV. Much of this understanding has already been translated into therapeutic treatment that has significantly improved our armamentarium against this disease.

This book "The Human Immunodeficiency Virus" provides a chronicle of the intensity of scientific investigation in an effort to control this disease. Each chapter is written by a different contributor, who is a leader in their respective field. Together they provide a compilation of our current understanding in the diverse area of HIV/AIDS research.

The book itself is highly readable and although each chapter is written so that it may be read independently, the format of the book is constructed to allow a broader appreciation of the expanse of scientific disciplines involved in HIV therapy and prevention, through basic and clinical sciences to social research and preventative education.

The initial chapter although somewhat brief, provides a comprehensive summary of the basics of retrovirology with a particular focus on the causative agent of human disease. The following chapter on HIV

genetics although outwardly similar to the first, is not full appreciated until later chapters since it provides a focused perspective on the attributes of HIV that make it such a formidable challenge, particularly in regard to multi-drug resistance and vaccine development.

Chapters three through five focus on antiretroviral therapy. These chapters detail the present viral targets: nucleoside-reverse transcriptase inhibitors (NRTIs), non-nucleoside reverse transcriptase inhibitors (NNRTIs) and protease inhibitors (PIs) respectively. The focus of each chapter includes known mechanisms of action, and resistance. These three chapters blend together nicely giving an up to the moment account of current progress, while reviewing of an area of considerable breadth.

The following chapters are naturally the focus of ongoing research into receptor, co-receptor interactions. Later, topics such as integrase inhibitors and accessory functions are particularly well treated.

Following these, as in previous chapters, the book allows the reader to smoothly transition between the bench top and the clinic into the chapter on translational research.

The importance of the information discussed in the chapter on prevention should not be understated by its relatively late position in the book; perhaps it should have been the first chapter. Prevention is in fact the foremost of available treatments, particularly in resource poor settings where other modalities are only now becoming available, at an unacceptably slow pace. With the intent to both improve the standard of care in these countries and stem the tide of an ever-burgeoning pandemic, drugs and an efficacious vaccine must become readily available. In the meantime, prevention certainly constitutes a laudable and readily attainable goal.

The final chapters are suitably reserved for a perspective on vaccines. These are a compilation of HIV/SIV immunobiology and HIV vaccine prospects, unfortunately both are rather brief. In light of the urgent need for a vaccine, prudence would dictate that these topics be allocated a more lengthy discourse. Nonetheless, overall the contributors do manage they do cover these topics well.

In sum, this book effectively integrates a particularly large and diverse area of research into a single volume that would stand to benefit students, investigators and clinicians.

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