Medicine for today and tomorrow

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Exploring the Biomedical Revolution

Edited by Maya Pines

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Any scientific institution must publish its annual, biannual, decennial or whatever commemoration report. In most cases, the result is neither very appealing nor readable, but this is of no great importance since the readership is mostly limited to contributors and would-be contributors. *Exploring the Biomedical Revolution*, edited and principally written by Maya Pines, is on a different level. Though this book is meant to be a glimpse into the world of the Howard Hughes Medical

Institute, its ambition and scope is much broader. In fact, no matter what kind of a scientist you are, or even if you are just an interested layman, I suggest you have this book on your bedside table and read a few pages every day before sleeping. It is pleasant reading, beautifully illustrated and provides excellent cultural material which no one should ignore.

Explaining science to the wider public is a difficult task, but one which the Howard Hughes Medical Institute has embraced for more than a decade. The result has been a number of publications dealing with fundamental questions of biology and medicine. These were so successful that over one million copies were distributed and special editions were prepared for high schools all over the world. *Exploring the Biomedical Revolution* builds and expands on this success. It addresses major aspects of modern medical research such as basic genetics (Blazing A Genetic Trail), developmental biology (From Egg to Adult), the brain and perception, public health and microbiology (The Race against Lethal Microbes) and structural biology (Finding Critical Shapes). These diverse topics are neatly pasted together with additional chapters ably written to provide continuity to the parts and a unity to the whole.

The book combines two apparently opposing approaches. On the one hand, it aims to convey dry, hard scientific facts, as in standard scientific articles; on the other, it tries to bring them to life by the traditional recipe of popular journalism, namely by focusing on the people who

make it happen. Whether the result is a success is a matter of taste, but no one would deny that the book is a mine of information and the illustrations are superb.

With all due credit to the effort represented by *Exploring the Biomedical Revolution*, I was left with an uncomfortable feeling. The book wants us to believe in the biomedical revolution unreservedly. Truly we all agree that a molecular and cell biology revolution is taking place before our very eyes, but the biomedical revolution is still to come. Nowadays people are much more skeptical of the perceived 'miracles' of modern medicine. They ask: why is Aids still spreading? Why do I get flu every winter? Why are we unable to cure genetic diseases? They ask: what shall we do with breast cancer diagnostics when no cure is available and if, one day, the biomedical revolution succeeds in eradicating illness and death, what are we going to do with such an impossible situation?

The public at large to whom the book is addressed is certainly confident that the biomedical revolution is a powerful tool for shaping the future of mankind. Most people are, however, not so sure about how this tool should and will be used. Some broader chapters on the relationship between the biomedical sciences and politics, on bioethics and on human values would therefore have been a valuable and complementary addition to the book.

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