

**Book Review** 

## Microcompetition with Foreign DNA and the Origin of Chronic Disease

by Hanan Polansky

Microcompetition with Foreign DNA and the Origin of Chronic Disease by Hanan Polansky gives an interesting general theory about how DNA processes could explain many of the mysteries of disease processes. Competition for transcription factors may alter the expression of genes that are normally regulated by such factors. Explanation of the theory involves extensive mathematical modeling; however, the general concepts are relatively simple. This is not an easy book to read; one has to spend some time wading through the theory in the first part of the book, in order to make sense of the many interesting examples. Much of the background information needed to understand the different processes would have to be found elsewhere. Although the book is fairly long, it indulges in so many fields of medicine that a complete treatise would be monumental in size. After developing the general idea, Dr. Polansky has painstakingly researched various types of human disease that could fit in the framework of microcompetition theory. The notion of a single explanation for disease conditions as divergent as osteoarthritis, cancer, autoimmune disease, obesity, stroke, atherosclerosis, and alopecia is indeed intriguing. The arguments that are presented make sense, despite some stretches of logic, though much research will be needed before this theory can be objectively tested. Perhaps that is the strongest point of this book. It suggests new directions for research on human disease. Experts in each area will have to decide whether and how to apply these ideas to our understanding of disease and for the development of new therapeutics.



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