Early Interaction between Animal Viruses and Cells

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Animal Viruses and Cells

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8 figures and 4 tables

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Over the past decade a vast amount of progress has been made in understanding viral replication cycles, but during this period there have been few detailed reviews of the early interactions between animal viruses and cells. In this Monograph KARL LONBERG-HOLM and LENNART PHILIPSON, active investigators who themselves have contributed substantially to the advancement of knowledge in this area, deal comprehensively with the early events in interaction of virions and cells, placing in context a monumental total of 756 pertinent references from the literature. Their review, a most valuable one which represents a happy combination of expertise and readability, covers the present state of knowledge about those events which begin with attachment of the virus at the plasma membrane and proceed through host cell macromolecular synthesis during early interaction — up to the point at which virus-specific macromolecular synthesis is initiated. As requisite background, the authors include a survey of present understanding of the virion structural proteins that participate in these early interactions and of the structure of the plasma membrane. In reviewing and analyzing the biochemical and morphological evidence that is available concerning the nature of the early steps in infection, they provide sophisticated generalizations where the evidence permits. They also offer helpful commentary on possible approaches to some of the important areas of information that still remain to be clarified.

JOSEPH L. MELNICK

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