MODERN METHODS IN THE HISTORY OF MEDICINE. Edited by Edwin Clarke. Athlone Press of the University of London, 1971. 389 pp.

New approaches are explored for historians, by 19 eminent writers, in 21 chapters of timely information. The historiography of ideas in medicine, as one aspect, notes that the historian of science is concerned with the thoughts that refer to facts and theories, be they true or not; whereas the scientist is concerned with facts and theories, asking whether they are true or not.

Most of the methods and techniques described have been introduced into the history of medicine recently. The investigation of disease, the rise of automation, statistical methods, diagrams, maps, oral history, practical history, and copying machines are considered. Aims to complement and supplement more traditional methods are discussed, besides possible directions as an academic discipline. Enhanced accuracy and the production of good history, while assisting in creating a more precise form, are objectives. Clarity of expression in this carefully assembled volume is only one of its virtues, besides valuable notes and references and a useful index.

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THE BIOLOGY OF ONCOGENIC VIRUSES. Edited by L. G. Silvestri. American Elsevier Publishing Company, Inc., New York, 1971. xii, 339 pp. $14.25 (Paperbound).

The prominent avenues of research in oncogenic virology are outlined in the collected papers which comprise this book. In attempting to discover what controls the expression of viral information in transformed cells, the small DNA viruses, polyoma and SV40 are the major research tools. The picture which emerges at present is that the entire viral DNA genome is integrated into the cell chromosome, that only part of the genome is transcribed as viral-specific RNA (so-called "early" functions), and that the transcribed viral RNA is found as large pieces perhaps containing some cellular transcripts in the cell nucleus and smaller pieces in the cytoplasm. It would be desirable to use viral DNA to make viral proteins in vitro, and a group at Cold Spring Harbor have started in this direction. SV40 DNA has been used as a template in a protein-synthesizing system and, although the product does not correspond to the capsid protein of SV40, new proteins are apparently made. Another problem which has occupied workers concerned with the biology of RNA tumor viruses, is that the Rous sarcoma virus (RSV) is capable of transforming cells, but not of replicating into complete virus without a "helper" virus. One strain of RSV, which appeared to be independent of "helper" virus, has now been shown by several groups to require a helper genetic material indigenous to certain chick cells. Another exciting observation is that strains of avian tumor viruses capable of transforming cells in vitro possess a subunit of RNA which is absent from avian tumor viruses (such as the leukosis group) which do not transform in vitro.

Characteristics of the RNA to DNA polymerase (reverse transcriptase) are described in several papers, and Temin discusses the implications of this enzyme for