

Book Reviews

Malignant Transformation by Viruses. Ed. by W. H. KIRSTEN. In series *Recent Results in Cancer Research* (General Ed. P. Rentchnick). Springer-Verlag, New York, 1966. Pp. 177+xiii. 51s.

A proper understanding of *in vitro* transformation, by viruses or other agents, would constitute a major advance in basic medical science. This book is the report of a symposium held in Chicago in February 1966, in which a quorum of the most eminent investigators in the field of viral oncogenesis were participants. The publication of the proceedings, including the critical discussions which followed each contribution and a masterly summary of the present status of the subject by A. B. Sabin (Cincinnati), only a few months after the symposium took place, sets a standard in general organization, editing and publishing which others would do well to emulate.

Contributions are grouped into three main sections: the characteristics, the genetics and immunology, and the significance to human neoplasia of malignant transformation by viruses. In the first section, I. Macpherson (Glasgow) reported that, by the use of the Kingsley Sanders soft agar technique for distinguishing between transformed and non-transformed cells, he and his colleagues had demonstrated reversion from the transformed state to the normal state in the BHK 21 line of cells. Reversion occurred regularly in cells transformed by the S-R strain of Rous sarcoma virus (RNA), but never in polyoma virus (DNA)-transformed cells. Sabin questioned the validity of using BHK 21 cells as a model on the grounds that 'normal' BHK cells show malignant properties when inoculated into hamsters, so that transformation did no more than increase the oncogenic potential of the cells. The remainder of the first section is made up of contributions on malignant conversion by Avian sarcoma virus, by polyoma virus and by the mammary tumour agent of mice.

On the subject of the production of specific antigens in relation to viral oncogenesis, the review by K. Habel and the critical comments of Sabin at the end of the volume, taken together, are strong medicine for those who because their factual knowledge is limited, tend to oversimplify this subject.

The section of the symposium dealing with the significance of viral transformation in relation to human neoplasia is the least informative, perhaps because of the continued failure to demonstrate a viral aetiology for any type of human cancer.

This book would be worth buying for Sabin's critical summary alone, and is to be strongly recommended to all engaged in basic virus and cancer research.

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