

The Microbe 1984. Part 1: Viruses

The Thirty-sixth Symposium of the Society for General Microbiology

Edited by B.W.J. Mahy and J.R. Pattison

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In April 1984 a Symposium was held at Warwick to celebrate the one-hundredth meeting of the Society for General Microbiology. This volume contains contributions from the twelve distinguished virologists who were invited to provide an overview of virology in the Orwellian year of 1984. Some of the chapters, all prepared prior to the meeting, differ substantially from the presentations at the meeting. The printed word cannot convey the precision of Peter Wildy's timing, the excitement of Stephen Harrison's computer graphics or the drama of Darryl Reanne's in absentia presentation by telephone link from Melbourne, Australia. Nonetheless the uniqueness of the occasion is conveyed.

Peter Wildy provides a highly original analysis of the development of virology distinguishing the emergence of sub-disciplines of ortho-, meta-, para- and epi-virology, concluding with a brief historical resume of the role of the SGM in the expansion of virology. Stephen Harrison's contribution on virus structure stands out by the variety and comprehensiveness of its illustrations and Duncan McGeoch's chapter provides a lucid and economical account of the nature of the animal virus genome. This is followed by a more specific

consideration of the replication strategy of poliovirus by David Baltimore. Carcinogenesis is explored in two chapters, Michael Bishop condensing the vast literature on retroviruses and oncogenes into twenty-eight pages, and Robin Weiss discussing the involvement of viruses in human cancer. Other chapters deal with the role of recombination in the life of bacterial viruses (Neville Symonds), the molecular evolution of viruses (Darryl Reanne), mechanisms of virus-host interactions (Bernard Fields) and the eradication of virus infection (David Tyrrell). John Pattison joins forces with Fred Brown and A.A. Brunt to discuss newly recognised viral diseases of plants, animals and man, and the final chapter by H.L. Sanger, the longest in the book, paradoxically deals with the smallest known infectious agents – the viroids.

Overall the text is clear, readable and well-produced. Individually the chapters are excellent, but as a whole the usefulness of the volume is diminished by its selectivity. However, despite the gaps in coverage, it does provide at a reasonable cost an easily assimilable impression of the contemporary state of virology. Highly recommended.

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