Despite the lack of X-ray crystallography, reovirus structure is relatively well understood and this owes much to studies with cryo-electron microscopy and their three-dimensional image reconstruction of fully hydrated virus particles. This structure and its relationship to function are clearly described in the first chapter of this excellent monograph. The rest of the volume is devoted to reovirus genetics and structural and non-structural protein function.

The molecular basis for reovirus pathogenicity and virulence has become a paradigm that is central to the chapters that makeup volume two. Apoptosis, persistence, pathogenesis in myocarditis, gastrointestinal disease and central nervous system infections are the subjects of separate chapters. Most of the work described is based on the mouse model and especially SCID mice. The model allows a clearer understanding of the molecular mechanisms and genetic basis of reovirus cell tropism and pathogenicity.

The immunology of reovirus infections is covered in the latter chapters of this volume — in particular the role of the interferon system and cellular and humoral immunity. The mucosal immunity to reovirus infections has a dedicated chapter which should be of interest to all virologists, as mucosal immunity presents the first line of defence against many viral infections.

All authors' honoraria received from the publication of both volumes will be used to support a lecture series on viral pathogenesis in honour of the late Bernard Fields, the founding editor of *Field's Virology*, who died in 1995, and ‘one whose presence is found throughout both volumes’.

G. BEARDS