

Preface

Plant virologists are fond of reminding their non-plant virologist colleagues of the myriad of contributions that Tobacco mosaic virus has played in the development of modern molecular biology. Our friends and colleagues who organized the 1998 Symposium celebrating 100 years of TMV research *Tobacco mosaic virus*, sponsored by the Royal Society of Edinburgh in Association with the Royal Society, provide a wonderful volume of personal accounts of the history TMV research in the *Philosophical Transactions of the Royal Society of London (Series B)* vol. 354. The contributors to that volume were among those who laid the foundations for the industrialization of plant virology through manipulation of plant virus genetic sequences in design of plant viral vector systems. In this volume, our co-authors provide a wonderful overview of how far the plant viral vector field has come in the intervening years. Our discipline is no longer exclusively in the domain of academics—there is a small, but growing number of small (but growing) biotechnology companies that exploit plant viruses as the platform for commercial innovation in crop improvement, industrial product manufacturing, and human and veterinary healthcare.

Many of us in the plant viral “vectorology” field can trace our scientific pedigree back in some fashion to Bill Dawson, and we are honored that he contributed the opening chapter of this volume with a narrative on the history of plant virus vector development. Bill reminds us that “a vector is not a virus; it is a device designed to perform a specific function.” Other contributors have provided fascinating reviews of how plant viral vectors have been adapted to serve specific functions, from plant gene function discovery through nanotechnology and providing infinitely scaleable manufacturing systems for valuable human therapeutics. We thank all of our co-authors for their contributions.

This year marked the death of an esteemed polymath, virologist, vaccinologist Dr. Hilary Koprowski, who late in his illustrious career championed plant viral vectors for their application in solving particularly difficult public health problems. We dedicate this volume to his memory.

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