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*To my grandchildren: Eliza, Alex, Ruby, Arlo, Thomas, Flora, Madeline and James*

*This book is dedicated to the memory of the late Dr. Stanley John Pirt (1923–2000), Professor of Microbiology at Queen Elizabeth College and later at King's College. During World War II, he served as a navigator in Bomber Command, and on one occasion, following a dispersal after a thousand bomber raid over Germany, he landed his Lancaster safely in Scotland with five minutes of fuel left in the tanks.*

*After gaining a degree in chemistry and a Ph.D. in starch structure, he worked with Sir Ernst Chain on the biosynthesis of various penicillins. From 1953 to 1961, he was Principal Scientific Officer at Porton and then moved to Queen Elizabeth College, where he set up a powerful Microbiology Department devoted to a wide variety of research interests from microbial growth dynamics and fermentation to the microbiological aspects of diseases. He strongly supported the establishment of an Immunology Unit within the college which concentrated on the study of immunological and microbiological features of ankylosing*

*spondylitis, rheumatoid arthritis, Crohn's disease and later the cattle disease bovine spongiform encephalopathy (BSE). These results then provided novel approaches to further investigations into the possible causes of multiple sclerosis. He was strongly supported in his work by his wife Margaret who was also a microbiologist.*

*He vigorously defended the work from the college and in a letter to The Times (July 25 1997) wrote:*

*"The fury raised by the challenge to the prion theory by the autoimmune theory of the disease reminds of Machiavelli's dictum: There is nothing more difficult to carry out, nor more dubious of success, nor more dangerous to handle than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order and only lukewarm defenders in all those who would profit by the new."*

# Acknowledgments

First, I would like to acknowledge the support of Professor Donald Robinson and Professor John Pirt from Queen Elizabeth College and later from King's College who supported the establishment of an Immunology Unit within their departments devoted to research into autoimmune diseases, especially ankylosing spondylitis, rheumatoid arthritis, Crohn's disease and later into bovine spongiform encephalopathy and multiple sclerosis.

They encouraged us academically and financially by providing the unit with Ph.D. SRC and MRC studentships as well as with laboratory space and general financial support.

Second, I would like to acknowledge the skilled laboratory work of many research workers and Ph.D. doctoral fellows, initially from Queen Elizabeth College and later from King's College, who were responsible for the excellent results that eventually saw the light of day in refereed publications. I would like to thank Dr. C. Wilson, Dr. T. Rashid, Dr. H. Tiwana, Dr. P. Cunningham, Dr. Lucy Hughes, Dr. C. Ettelaie, Dr. A. Binder, Dr. S. Bansal and Dr. Sandra Amor.

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In 1997 (CSA 4302=£18,032) and in 1999 (CSA 5115=£216,228), the Government through MAFF and now the Department of Environment, Food and Rural Affairs (DEFRA) authorized and funded two studies into the possibility that BSE could be an autoimmune disease. The combined results of these two studies, involving 157 BSE-affected animals and 229 healthy ones, form the basis of the report submitted to DEFRA and are included in this book.

Additional financial support to carry out this study was obtained from the American Friends of King's College.

I also would like to acknowledge Dr. N. Cox from Winchester who introduced us to Mr. W. Cartmell who provided sera from cattle from an organic farm which had never used feed supplements.

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Dr. John Croker and Dr. Judy Vowles from the Department of Geriatric Medicine at University College Hospital, London, provided 20 sera from patients who had sustained in the preceding 12 months a cerebrovascular accident or stroke, and Professor Gavin Giovannoni carried out a study comparing CSF and serum anti-*Acinetobacter* antibodies.

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Finally, I would like to thank members of the House of Commons, especially Mr. Tam Dalyell MP, Mr. Peter Ainsworth MP and Sir Nicholas Soames MP, who supported our efforts to obtain funds from DEFRA.

This book would not have been possible without the support of all these people, but the errors of commission as well as the opinions expressed are all my own.

London, UK

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