

Chapter 18. Reflections, Frank Fenner

In this final chapter, I want to reflect on two matters, one that spanned my working life, namely special friendships, and the other an analysis of the relative importance of nature, nurture and chance, as they affected my father and myself.

Special Friends

Friendships are an important element in everyone's life. Lifelong friendship with one's wife is the most important and one that I enjoyed in full measure, but I have had many other friends. Here I want to acknowledge the debt I owe to several special friends who have been important to me at various periods of my life, many of who still are. I mention a number of them at some length in the 'boxes' in earlier chapters; those who were close personal friends were Ted Ford, Cecil Hackett, Francis Ratcliffe, Ian Marshall, Gwen Woodroffe, D. A. Henderson and Isao Arita. Two of my mentors, Macfarlane Burnet and René Dubos, were also close friends. Here I will list some other friends chronologically and alphabetically and provide a few comments on each of them.

School Days

The one person who I remember as a special friend from primary school days is John Dowie, a noted sculptor and painter who still lives in the same house as he did in the 1920s. I greatly enjoyed visiting him in his house and studio, with my sister Winn and my brother Bill, as recently as April 2005.

The one person I remember from Thebarton Technical High School is Alf Chittoch, who I met again when I visited Tennant Creek in 1968, where he has lived since the war and risen from being a 'battler' in the mines to Mayor. We have maintained annual correspondence ever since.

University Days

The friend that I remember best from Adelaide High School and university days is Denis Shortridge, who subsequently became an ophthalmologist in Sydney. Later he moved back to Adelaide and I used to visit him every time I went there until he died in the mid-1990s. In recent years, whenever I visit Adelaide I arrange to have lunch at the Army and Navy Club with all those of my year at medical school who are able to come. We had a special meal there in 1994 to which about a dozen came; now the 'regulars' have fallen to two, Alan Campbell and Malcolm Newland.

Army Days

My best friend in early Army days was Noel Bonnin, a surgeon who was six years older than me but who was initially in the same unit as I was (2/6 Field

Ambulance) and carried out some research with me when we were in the Woodside Camp. Later, when we were both in the same unit in Lebanon (2/1 Casualty Clearing Station) we went on two wonderful week-long trips, first to Petra and then to Luxor and Aswan. Later my close friends in the 2/2 Australian General Hospital were Orme Smith, Ian Wood and Rod Andrew, and in New Guinea, Ted Ford.

Melbourne Days

I lived in Melbourne from October 1945 to August 1948, and again from February 1950 to November 1952. During the second period, Bobbie and I lived in and she looked after the houses and children of Alan and Mavis Jackson (I knew Alan in New Guinea as a pathologist and we co-authored one scientific paper) and Macfarlane and Linda Burnet. Both Bobbie and I became close friends of the Burnets and the Jacksons.

Canberra Days

Bobbie was a much more sociable person than I was, and several of my current friends in Canberra derive from her friendships. In the ANU and especially in the JCSMR, I met a very large number of people, many of whom became close friends. I also met a number of scientists during my overseas travels who became, and remain, close friends. Co-authorship of books was important in developing friendships. I will list some of them as Local Friends and Overseas Friends, arranged alphabetically.

Local Friends

Gordon Ada

I knew Gordon from early Hall Institute days and he came to Canberra several times to give seminars here. In 1962, I tried to recruit him as Reader in Biochemical Microbiology, but the Hall Institute was still too attractive. Then, in 1968, he was appointed as my successor. I moved to CRES in 1973 and we became really close friends in 1991, when he came back to the School as a Visiting Fellow and occupied the office next to mine. Since then we have always had morning coffee together and discuss the woes of the modern world.

Rod Andrew

Rod was a senior physician in the 2/2 Australian General Hospital when I was there in 1942 and after I went to New Guinea he was deeply involved in looking after volunteers who had been given malaria at the LHQ Medical Research Unit. After the war he became Dean of the Monash Medical School, and in 1964 he was responsible for recommending the award of my first honorary degree (MD). I visited Monash University intermittently after that and, in April 2004, I gave the first Roderick Andrew Oration there.

Stephen Boyden

Stephen, an Englishman, worked with René Dubos a year after I did, and was subsequently appointed to the Department of Experimental Pathology in JCSMR. He was elected a Fellow of the Australian Academy of Science in 1966 for his work in immunology, but in 1965 he had decided that he wanted to get away from reductionist science and transferred to my department in that year, to work on human ecology. He subsequently transferred to the new Department of Human Biology and in 1975 to CRES, where he worked until retirement in 1990. In 1991, following the interest expressed by several people in the audience when he gave a lecture at Questacon, he set up a non-governmental community body, the Nature and Society Forum, of which I became an early member and later a patron. I regard him as perhaps the most creative younger scientist whom I have known well (thus excluding Burnet), and he and his wife Rosemary have been among my closest friends, especially during the last decade.

Ruth Conley

Ruth was the nursing sister at Canberra Boys' Grammar School and a good friend of Bobbie's. Since Bobbie's death and her retirement to a cottage near the Yarralumla shops she kindly invites me to have lunch or dinner with her and other friends.

Jack Crawford

Jack was a senior public servant and a member of the tennis group that I had joined as soon as I was settled in Canberra. In 1960 he was appointed to the ANU as Director of the Research School of Pacific Studies, and from 1968 to 1973, a period coinciding with my term as Director of JCSMR, he was Vice-Chancellor. From the mid-1960s, we were very close friends, and he and his wife Jess played bridge with Bobbie and me every Saturday night for over a decade; we visited Jess every weekend after Jack died in 1984.

Walter Crocker

Coming from a South Australian farming family, Walter had extensive experience in the British diplomatic corps in Africa during the war. In 1948, Copland persuaded him to join the Research School of Pacific Studies as Professor of International Relations. We got to know him well because he built a house almost opposite ours in Torres Street, Red Hill. He transferred to the Australian diplomatic corps in 1952 and initially filled important posts in India and Indonesia. In 1956, he invited me and two colleagues to Indonesia for three weeks to advise him on the best location for a medical school in Sumatra. Then, in 1960–61, he organized a six-weeks visit for me to virology laboratories all over India. After he retired in 1970, he went back to his farm, but in 1973 he was appointed Lieutenant-Governor of South Australia; I stayed with him once

at a time when he was living in Government House. Eventually he retired to a house very near the beach at Grange, an Adelaide suburb on the coast. For many years I used to visit him there whenever I went to Adelaide; he always plied me with penetrating questions. He died in 2002 at the age of 100.

David Curtis

David had joined Jack Eccles as his first PhD student in 1954. He rose to be Professor of Pharmacology when that department was created in 1973 and was appointed Director of the JCSMR, 1989–92. He was elected a Fellow of the Academy of Science in 1965 and appointed President, 1986–90. He and his wife Laurie were always good friends and he hosted many lovely dinners which we enjoyed at his home in Campbell. In 1999–2001, we collaborated in producing a history of the first 50 years of the John Curtin School.

Max Day

Max Day was born on exactly the same day as I was, one year later. For many years, Max and his wife Barbara and Bobbie and I would celebrate our birthdays with dinners, alternately at our respective homes. In the early 1950s, he worked in CSIRO Entomology on the transmission of plant viruses and he was the first person with whom I collaborated in laboratory work in Canberra. I used to come up from Melbourne to work with him on the mechanical transmission of myxoma virus by mosquitoes. Later he became a member of the CSIRO Executive and then Chief of the CSIRO Division of Forestry. Appointed a Fellow of the Australian Academy of Science in 1956, he became very much involved in environmental problems in Kosciusko. He was an early member of our tennis group and we played on his court in Melbourne Avenue for over twenty years, until he sold the house in 2002.

Jack Eccles

Jack was older and more distinguished than the other early professors when he joined us in Canberra in 1954. I got to know him well when he was President of the Australian Academy of Science in 1957–61 and I was Secretary, Biological Sciences. In the early days, I also used to play tennis with him and some of his children in their home just down the street from ours and Bobbie was very friendly with his wife Rene.

Marcus Faunce

Marc Faunce came to see me shortly after he came to Canberra in 1957, enquiring about research work in the JCSMR, which at that time had no connections with Canberra hospitals. He was a first class physician, attending no less than five Governors-General and three Prime Ministers. He also examined me once a year and more often if necessary, essentially he was my GP until he retired. Then we

used to visit each other on alternate week-ends, in Wanniasa and Red Hill. After his colon cancer became incurable in 2004, he stayed for several months with the former chief pharmacist of the Canberra Hospital, Enid Barnes, and I used to visit him there at least once a week. He was cheerful until the very last days. I still visit Enid and see two of Marc's other close female friends there every Monday afternoon.

Bryan Furnass

Born in Manchester in 1927, Bryan came to Australia in 1966 as physician to the ANU Health Service, in which he developed the concept of 'Wellness', established walking trails around the ANU campus, and served until 1993. He then became very active in the Nature and Society Forum, where I came into closer contact with him and his wife Anne. He was a skilful writer on popular science, which included books on nutrition and microbiology and letters to the *Canberra Times* and the *Guardian Weekly*.

Adrian Gibbs

I had met Adrian, a plant virologist, on a visit to Rothamstead Experimental Station in England in 1965. He joined the Department in 1966, went back to England in 1969 for a few years and then came back, with my support, to a senior position in the Research School of Biological Sciences, ending up as a Professor and a Fellow of the Academy of Science. Our common interest was viral taxonomy, and as an animal virologist I found his insights very valuable. One of his sons was an expert balloonist, and he and Adrian took me for a wonderful flight over Canberra.

Alfred Gottschalk

I first met Alfred, a refugee from Hitler's Germany, when I went to the Hall Institute in 1946, and I got to know him quite well then. After he retired in 1958, at age 65, he joined the Department of Microbiology as a Visiting Fellow, funded by an NH&MRC grant. He had separated from his wife and lived alone in a flat in Northbourne Avenue, and we used often have dinner together. He returned to Germany in October 1962, to a position in Tübingen; he died there in 1973. I was the executor of his will, which included a donation of \$36,231 to establish the Gottschalk Medal of the Australian Academy of Science.

Alan Jackson

Alan had worked with Burnet from 1936 to 1939 and then spent six years working as a pathologist in the 2/9 Australian General Hospital. I saw quite a lot of him when we were both in Port Morseby and we collaborated in a long paper on infections with *Salmonella blegdam*. Bobbie and I really got to know and love the family when we looked after them while he and Mavis spent a

Keogh-organized year overseas just after we had come back from the Rockefeller Institute. Each of us always visited them whenever we went down to Melbourne, and we remained very good friends with Alan, Mavis and the children.

E.V. (Bill) Keogh

As I mention in Chapters 3 and 4, Bill Keogh played a major role in my career. We were friends, but he was a reserved man and much older than me, and I don't know if he had many 'close' friends, although he greatly influenced the careers of many army medical officers. However, he and fellow Adelaide University medical graduate of mine, John Funder, Sr., went on a couple of long drives with me through the countryside in Victoria.

Kevin Lafferty

Kevin joined the Department of Microbiology in 1957, as a PhD student with Stephen Fazekas. After postdoctoral studies in Canada he came back to the Department as a Research Fellow and later rose to be a Professorial Fellow in the Department of Immunology. After several years as a professor in the University of Colorado in Denver, where I visited him several times. In 1993, he returned to Canberra as Director of the John Curtin School and was very supportive of my work in the School.

Jim McCauley and Doris; Cam Webber and Joanna

My GPs after Marc Faunce retired, Jim and then Cam, have been good friends. Since Jim's retirement, I always seem to be running into him and Doris at various 'Friends' events, at the National Library and the National Portrait Gallery.

George Mackaness

George had spent a few years with Florey in Oxford before he came out to Canberra in 1954 as Head of a small Department of Experimental Pathology. He carried out some excellent work on cell-mediated immunity in intracellular bacterial infections, for which he was elected FRS in 1976. A couple of years after Colin Courtice had been appointed Head of Experimental Pathology in 1960 George accepted a chair in the Department of Microbiology at the University of Adelaide. We became friendly because we both had an interest in cellular immunity. Then, in 1965, René Dubos, with whom he had spent a study leave year, invited him to be Director of the Trudeau Institute for Medical Research in Saranac Lake. Later, in 1976, he became President of the Squibb Institute for Medical Research and went to live in an enormous converted barn in New Jersey. Bobbie and I visited him in Saranac Lake and also in his 'barn'.

Barrie Marmion

I first met Barrie when he came from England to the Walter and Eliza Hall Institute as a Rockefeller Foundation Visiting Fellow in 1951. He came to Australia again in 1962, to be the foundation Professor of Microbiology at Monash University. In 1968, he moved to Edinburgh for 10 years, then came back to the Institute of Medical and Veterinary Science in Adelaide. He officially retired in 1985, but continued to be very active in investigations of various aspects of Q fever. I have known him throughout this period and seen him most often during the last ten years. I see him and his wife Diane whenever I visit Adelaide.

Cedric Mims

In 1953, I visited the research institute in Entebbe, Uganda, primarily to see John Cairns, who joined the Department of Microbiology two years later. Cedric went to Entebbe in 1954, and joined my department as a Research Fellow in 1956. His work on the pathogenesis of infectious diseases was of special interest to me and he worked his way up the ladder to become a Professorial Fellow in 1968. In 1972, he was appointed Professor of Microbiology at Guys Hospital Medical School in London, and proceeded to write a book on the pathogenesis of infectious diseases. I visited him several times in London and also in his lovely home, a couple of hours by train south of London. All their four children were in Australia and he and his wife Vicki came out periodically to see them, but in 2002 they decided to come out here permanently. They used to come for gossip and a drink on alternate Sunday evenings; Vicki had to move to a nursing home a year ago but Cedric continues to come.

Geoff and Margaret Rossiter

Geoff was Executive Officer of the US Educational Foundation (Fulbright scholarships) in Canberra from 1950 and Bobbie became a close friend of his wife Margaret. In 1965, he became Warden of Burton Hall, at the ANU. After he retired and after Bobbie had died and I had moved into the extension of the house, I initiated the pattern of drinks and nibbles with them, which changed when Margaret had to move permanently to Morling Lodge, a nearby nursing home, because of severe arthritis. Gwen Woodroffe, Geoff and I would then have a drink at my place and then drive up to Morling Lodge and have another, and more gossip, with Margaret. Both Geoff and Margaret died in 2004.

Richard Smallwood

Professor of Medicine in the University of Melbourne, Richard resigned from that position in 1999 to come up to Canberra as Chief Medical Officer of the Commonwealth of Australia. I met him when he was developing procedures for handling a bioterrorist attack with smallpox virus. We lived close to each other

and he and his wife Carol often invited me to dinner at their home. They also used to come to my weekend drinks and nibbles.

Michael Studdert

In the early 1980s, when I decided to publish *Veterinary Virology*, I enlisted the help of several overseas veterinarians, but I also wanted an Australian co-author, and Michael, the first Professor of Veterinary Virology to be appointed in Australia, was the man for the job, and we became close friends. As an expert in equine virology, he made valuable contributions to the original book and all subsequent editions.

Bob Walsh

Bob set up the New South Wales Blood Transfusion Centre during and after the War, and in 1973 became Dean of the Faculty of Medicine at the University of New South Wales. I first got to know him through the Australian Academy of Science and later the Medical Research Advisory Committee of Papua New Guinea. We became very close friends and served together on various Academy committees. I would always call and see him, and often stay overnight with him, if I went down to Sydney during the 1970s.

Hugh Ward

Hugh's brother, Dr Keith Ward, was Government Geologist in South Australia and I knew him in prewar years. I got to know Hugh when he was Professor of Bacteriology at the University of Sydney. During the 1950s, he used to ask me down to Sydney to lecture to his medical students and I would stay overnight with him, at a time when I was never asked to lecture to undergraduates in ANU. A very unassuming man, he had a remarkable record in World War I; as a medical officer he was awarded the Military Cross with two bars. He, Mac Burnet and Bill Keogh exerted considerable influence on medical research in Australia in the early post-war years.

Wendy Whatson

Wendy was another friend I inherited from Bobbie. As well as periodic dinners with her and John at their lovely home in Shackleton Circuit, in Mawson, since Bobbie's death in 1995 Wendy is the most generous friend anyone could dream of in terms of dropping in beautiful cooked meals for me every now and then.

David White

David's father, Harold White, the creator of the National Library of Australia, lived close to us and regularly invited Bobbie and me to his garden parties. His eldest son, David, a Sydney medical graduate, was one of my first PhD students and later became Professor of Microbiology in the University of Melbourne. He

was an outstanding teacher, and when I decided to produce *Medical Virology* as a student's textbook, I persuaded him to be a co-author, and we collaborated in all later editions and in *Veterinary Virology*. Naturally, we became very close friends. He and his wife Marjorie came to Canberra at the time of my 80th birthday celebrations and David was one of the three speakers at the celebratory dinner.

Overseas Friends

Derrick Baxby

With poxviruses my early and continuing scientific interest, I soon found that Derrick, who had trained with Alan Downie at Liverpool University, knew more about the history of vaccinia virus than anyone else in the world, and we conducted a long and protracted correspondence. I also visited him whenever I was in England for more than a few days, and we became and remain good friends.

Joel Breman

Joel worked in the Smallpox Eradication Unit in Geneva for three years and in 1978 he accompanied me on a visit to China to check its eradication status. We have kept in touch ever since and I have occasionally collaborated with him to produce articles on smallpox. He is currently Director of the Fogarty International Center at US National Institutes of Health and we still exchange papers and emails on medical topics.

Bob and Beth Chanock

The Chanocks are my closest friends in the United States. Bobbie and I first got to know them well in 1972, on my second term as a Fogarty Scholar. He was a virologist and head of the infectious diseases unit in the NIH; they lived in a large house in Bethesda and apart from the periods when I was on a Fogarty scholarship I always stayed with them when in Washington. When I was there for prolonged periods as a Fogarty Scholar with Bobbie in 1973–74 and 1982–83, they also took us to concerts at the Kennedy Center and introduced us to the many exhibitions in the galleries in Washington, and were most loving and hospitable. They came out to Canberra at the time of my 80th birthday celebrations and Bob was one of the three speakers at the celebratory dinner.

Alan Downie

Alan, Professor of Microbiology in the University of Liverpool, was the leading British expert on smallpox in the 1940s. I first met Alan and Nancy when I visited Europe in 1949 and always went to see him on later visits. Keith Dumbell and Derrick Baxby were among his students, all were experts on poxviruses. Alan and Nancy both came out to Australia and stayed with us in Canberra.

Keith Dumbell

A PhD student with Alan Downie, Keith Dumbell became Professor of Virology at St Mary's Hospital Medical School and was the leading authority on variola virus during the smallpox eradication program. We met often at committee meetings in Geneva. After his wife died he married a South African woman and they went to Cape Town, where he was appointed Professor of Microbiology. I used to stay with them whenever I visited Cape Town and although he has now retired we still correspond regularly.

D. A. Henderson

I have outlined the career of DA (as he is always called) in a 'box' in Chapter 16. Naturally, I saw a lot of him in Geneva throughout the campaign, and much more when I was writing *Smallpox and its Eradication*, for which he was the author of almost all the 'operational' chapters. He did this while carrying the heavy task of Director of the Johns Hopkins School of Hygiene and Public Health. I stayed with him and Nana whenever I visited Baltimore, and I was delighted when he and Nana came out here for my 80th birthday celebrations; he was one of the three speakers at the celebratory dinner and awarded me a unique accolade, Grand Master of the Order of the Bifurcated Needle.

Zdeno Jezek

I saw a lot of Zdeno, who was on the staff of the Smallpox Eradication Unit, in 1980–88, when I visited Geneva several times each year while producing *Smallpox and its Eradication*. He was a great help in going through the WHO Archives. From 1980–86 he had also been in charge of a major WHO study of monkeypox in Zaire, and in 1987 we collaborated in producing a small book, *Human Monkeypox*. In 1995, I was able to visit Zdeno and his wife Eva in their home in Prague, where he took me on a wonderful tour through that beautiful city.

Edgar Mercer

I list him here, but Edgar was just a year ahead of me at Adelaide High School and the university, and I got to know him well when I spent three months in St Andrews College in Sydney in 1940 studying for the Diploma of Tropical Medicine, since he also boarded there. In 1963, he came to the JCSMR as electron microscopist. He was also a sculptor and made two sculptures for my garden. In 1967, he went to Phoenix, Arizona, and made a living as a sculptor, but left there a few years later to become Professor of Biology at the University of Hawai'i and lived on the Big Island in Hawai'i. I visited him there several times and he drove me everywhere. He retired to the mountains in Switzerland, where again I often used to visit him.

Fred Murphy

I had met Fred several times when he was at the Centers for Disease Control in Atlanta, and he was a Visiting Fellow at the JCSMR in 1970–71, but our close friendship dates from his involvement in the production of *Veterinary Virology*, the first edition of which was published in 1987. The chapters he wrote were excellent and his comments on those written by others very helpful, and after I had pulled out he supervised the production of the third edition in 1999. Our friendship was cemented by a week-long trip with him and his family through Yellowstone National Park in 1997, just after a meeting of the American Society of Virology in Bozeman, Montana. I have visited many interesting parts of the world, but none more exciting and unusual than Yellowstone, in such company. Very recently, he sent me a copy of his 'Memoir', a marvellous life story with superb colour photographs and a most illuminating text.

Nature, Nurture and Chance

I believe that the three words: nature, by which I mean the combination of genes that each of us inherit from our parents; nurture, by which I mean the way that our physical and our social environment, especially during childhood, influence our physical, mental and emotional characteristics; and chance, in its dictionary definition, the 'way things fall out, fortune', cover every other happening that influences our careers as human beings. Within these definitions, I would now like to compare my father's life and mine.

It is difficult to compare the genetic component. Neither my father nor I had any worrisome disease with a genetic basis, although possibly his addiction to smoking had some such components (I never smoked, so I don't know if I carry those hypothetical genes). In terms of the capacity to work hard and carry out scientific research effectively, we resembled each other more than either of us resembled our male siblings. I believe that my liking for writing books about science and science history, rather than exclusively in journals and review articles, which is the practice of most experimental biologists, must have been inherited, for Father was a very able science writer. The examples of two of my mentors, Burnet and Dubos, both of whom wrote many books as well as hundreds of papers on experimental biology, may also have had an influence.

In relation to 'nurture', father was born into a poor family and had to work as an 'apprentice printer' (before the days of formal apprenticeships) from the age of 11, although all the evidence that I can obtain is that the large Fenner family had very supportive parents. On the other hand, I was born as the second child of a middle-class family and had the best opportunities available in the country, at that time, in my school and university education. Father had to make his own way from printer's devil through pupil teacher to Teachers' College and

university, whereas my childhood and adolescence were arranged by my family as I wanted them. There could hardly have been a greater difference.

The principal element in both our careers, given our innate abilities as shaped by nature and nurture, was chance. I presume that his marriage to Emma Louise Hirt contained an element of chance, in that they both happened to be boarders at the Melbourne Teachers' College at the same time, and she was a most supportive wife as well as a loving mother. Otherwise, it is difficult for me to evaluate that element in my father's career, except to express the view that the great disappointment of his life, I think, was the failure of the University of Sydney to select him to fill the place of Griffith Taylor as Associate Professor of Geography in 1929. Here, chance undoubtedly played a role, for if the opportunity had come after his trip to England in 1931 as one of the Australian representatives at the Centenary Meeting of the British Association for the Advancement of Science, I feel certain that he would have been selected, for he made a very good impression on the British geographical fraternity on that trip (see Chapter 17).

Although I have more empathy with his work as a scientist than with that as a bureaucrat, some comments on the latter are relevant here. At the time of his 'importation' from Victoria in 1916, he was regarded as an outsider by many South Australians, and he was finally appointed to the influential position of Director of Education just as World War II began, and resigned because of illness just after it finished, so that his visions for the future could not be realized. It is useful here to recall two tributes to his work in the Education Department, the entry in Hansard in 1947 by the Hon. S. W. Jeffries, long-time Minister for Education, and the comment by the Director-General of Education, J. S. Walker, in 1967 (see Chapter 14).

Chance elements in my own life were undoubtedly influenced by my father's standing and friendship with colleagues in the Royal Society of South Australia. Thus, I was given the opportunity to take part in an expedition organized by the Board of Anthropological Research when I was a second-year medical student; this led directly to my work on Aboriginal skulls which constituted the basis of my MD degree. When I began writing this autobiography, I thought that the event that played a major part in my military career and most of my subsequent career, the decision to go to Sydney and obtain a Diploma of Tropical Medicine (DTM) before I enlisted, was a matter of chance. None of my fellow-interns did that and my father did not know enough about medical training to have advised me. However, thinking over the early history of World War II, Australian troops were being directed to the Middle East in January 1940, and I may well have decided that in the Middle East a DTM would be likely to open up career possibilities not available to a raw graduate.

It was that step that led to the switch of my interests from physical anthropology (and in a university sense from a career in anatomy and cell biology) to infectious diseases and thus to my post-war career. On the way, it led to my close acquaintance with Neil Hamilton Fairley and Bill Keogh, and through them to my experience as a pathologist at the 2/2 Australian General Hospital, and, later, my appointment as a malariologist. Most importantly, if I had not been appointed as pathologist at the 2/2 AGH, I would never have met Bobbie Roberts, my future wife.

It was Bill Keogh who arranged that I should work with Burnet after the war, and later, in consultation with Burnet, to take a year's study leave with René Dubos. Three later career decisions were not matters of chance. In 1967, I decided to apply for the position of Director of the John Curtin School because I had spent so much time writing *The Biology of Animal Viruses*, and, without a training in biochemistry, felt so out of touch with molecular virology, that I thought it would be difficult to take up bench-work again. Then in 1973, approaching the end of that appointment as Director of the John Curtin School, I was influenced by what I saw as Hugh Ennor's mistake, namely the risk that I would think I knew all about the job if I took on a second term. Directorship of the newly established Centre for Resource and Environmental Studies offered the opportunity of indulging my interest in environmental matters, which had become prominent in my writings in the early 1970s, while still Director of the John Curtin School.

Finally, the fact that I have been able to continue writing books, book chapters and review articles, and giving occasional lectures, ever since I retired from paid employment in December 1979 depended on my continued good health, and the fact that I was working in the John Curtin School of The Australian National University, institutions that encourage such activities.

