

## Eulogy – Gavin Thomson (3 February 1943 – 23 April 2021)



Gavin Reckless Thomson was born in Johannesburg, South Africa on 3<sup>rd</sup> February 1943 and grew up in Zimbabwe (former Rhodesia).

He matriculated from Milton High School in Bulawayo and qualified as a veterinarian at the University of Pretoria in 1966. He returned to Zimbabwe after graduating and spent three years as a state veterinarian under the conditions of his bursary and loan from the Rhodesian Government. In his third year of the veterinary course he had decided to become a virologist, and it is likely that his responsibilities in terms of controlling foot and mouth disease outbreaks in the field further piqued his interest in virology.

In 1970 he obtained an MSc degree in Immunology at the University of Birmingham, UK, and on his return to Zimbabwe after that highly stimulating year of study he joined the staff of the veterinary laboratory in Harare (then Salisbury) where he set up a virology unit. In 1972 he obtained a position as virologist at the Royal Veterinary College of the London University, which enabled him to undertake a PhD study under the supervision of Prof Walter Plowright, a world-renowned virologist, on respiratory infections of Thoroughbreds, funded by the Thoroughbred Foundation, obtaining the degree in 1978.

Gavin returned to South Africa in 1978 to take up an appointment at the Onderstepoort Veterinary Institute (OVI), where he was to occupy various positions, the last of which was Director of the OVI, until November 2000.

After working with equine viruses at the RVC for more than five years he was strongly drawn to African horse sickness, but was instead given the task of research on viral diseases of pigs, with a strong focus on African swine fever.

This was fortunate, as his groundbreaking work on the sylvatic cycle of maintenance of the ASF virus between common warthogs and the *Ornithodoros moubata* complex ticks that live in their burrows resolved the enigma of how transmission to ticks was accomplished by warthogs when their level of viraemia was too low to be infective. His research, involving experimental infection of warthogs, confirmed R. Eustace Montgomery's pioneering research on ASF virus transmission in Kenya published in 1921.

Like Montgomery, Gavin demonstrated lack of transmission to in-contact pigs by even acutely experimentally infected warthogs. Gavin also showed that consumption of the tissues of acutely infected warthogs was unlikely to be a major source of infection for domestic pigs.

The practical laboratory work was performed at the Foot and Mouth Disease Laboratory, later the Exotic Diseases Institute, where Gavin worked from 1980 and of which he later became Director. His other important research involved the relationship between the Southern African Territories (SAT) FMD viruses and the African buffalo, and later other wild ruminants, with a focus on the populations in the Kruger National Park. He also headed the rabies research team and, working with international collaborators, initiated technology at OVI that enabled a better understanding of the relationship between canid and viverrid biotypes of the rabies virus.

Gavin's scientific achievements were increasingly recognised nationally and internationally. In 1999 he received the Gold Medal of the South African Veterinary Association in recognition for outstanding scientific achievements and promotion of veterinary science. He served as Vice President of the Foot and Mouth Disease and Other Epizootics Commission of the World Organisation for Animal Health (OIE) from 1994 – 2000 and was elected to serve as President of that Commission from 2000 – 2003, and to serve as a member of the Scientific Commission of the OIE from 2003 – 2006. From 1994 onwards he performed consultancies on the epidemiology and control of both FMD and ASF in several countries in Africa as well as Philippines, Pakistan, India and Mongolia. In March 1998 Gavin was appointed Director of the OVI after the Exotic Diseases Institute was amalgamated with it soon after the retirement of Dr Daan Verwoerd, but in November 2000 he resigned from that position to become more directly involved in epidemic animal diseases at international level. In December 2000 Gavin was employed by the Food and Agriculture Organization of United Nations (FAO) and seconded as the main epidemiologist to the Pan-African Programme for the Control of Epizootics (PACE),

with its headquarters in Nairobi, Kenya. After five years in that position, which involved extensive travel in West, Central and East Africa, and included travelling in convoys stopped by gunfire ahead, taking a shower in Chad under the beady eye of many cockroaches and travelling a narrow precipice-hugging road in Eritrea, as well as less alarming experiences, he reached FAO retirement age. After six further months in Nairobi at the International Livestock Research Institute helping to set up the Global Alliance for Livestock Vaccines, now the Global Alliance for Livestock Veterinary Medicines (GALVmed), he returned to South Africa in 2005. Soon after his return he set up with Prof Mary-Lou Penrith as partner a consulting company, TAD Scientific. He was appointed as Extraordinary Professor in the Department of Veterinary Tropical Diseases, Faculty of Veterinary Science, University of Pretoria and supervised a number of postgraduate students on FMD and related topics.

One of Gavin's greatest talents and pleasures was scientific writing, and he was the author of numerous scientific articles and book chapters. While still at OVI he and a colleague, Prof Koos Coetzer, conceived the idea of a comprehensive book on infectious disease of livestock. At the time many international researchers were reluctant to be associated with anything to do with South Africa, so the first edition was entitled *Infectious Diseases of Livestock, with special reference to Southern Africa*. With two other editors, they compiled a magnificent two-volume textbook that was published in 1994 and received national and international acclaim through receiving two prizes: the Bill Venter Literary Award for the best academic book published by personnel of a South African University in 1996 and the Malbrant-Feuten Prize of the French Veterinary Academy (Académie Vétérinaire de France) in 1998 for producing a book of international standard.

Before leaving South Africa, Gavin had become concerned with the plight of cattle farmers in areas not free from FMD and thus were excluded from higher value markets, and applied his innovative mind to the problem. He realised that both the way in which FMD was managed and the trade standards for beef needed to change. He was still working on the former until shortly before his death. First he focused on how freedom from FMD virus in the beef could be assured regardless of the area of production and came up with the concept of commodity-based trade. The approach resonated with conservationists, who were deeply aware of the negative effects of the veterinary cordon fences used to separate livestock and wildlife were having on wildlife. Working with the AHEAD (Animal Health for the Environment and Development) team of the World Wildlife Foundation, later based at Cornell University, considerable progress has been made, including modification of some of the OIE trade standards, and we are hoping that this legacy of Gavin's will grow and gain international acceptance to eventually open up better markets for cattle producers in areas that are adjacent to wildlife conservation areas and also reduce the need for veterinary cordon fences.

What was this outstanding scientist like otherwise? When I started to work with him, I was told that he was a gentleman and that he did not suffer fools gladly! Both of those things were true, but there was so much more. He was a kind, loyal and inspirational friend, he had a remarkable sense of humour, and he was knowledgeable about many things, including South African history, and was very well read. He was passionate about sport, in his youth a keen and accomplished rugby player, who also ran marathons including the Comrades, cycled, canoed, played squash and loved to watch sport both live and on television.

Apart from his true passion for his work, Gavin was a devoted family man, and will be greatly missed by his wife of 48 years, Marguerite, his three daughters, Charlotte, Rowena and Robyn, and his greatest pride and joy, the three grandchildren Sean, Jenny and Ryder. He will also be missed by his many colleagues and friends, in particular those of us who will try to build on the foundations laid by a pioneering spirit who inspired many to do better than they had ever believed possible. Well done, and rest in peace. 🇱

Koos Coetzer and Mary-Lou Penrith