

Theiler Memorial Trust Award



Prof. Alain Provost

Second recipient of the Theiler Memorial Trust Award

In 1988, the Theiler Memorial Trust was founded by Theiler's daughter, Margaret Theiler, in memory of her father, Sir Arnold Theiler, pioneer of veterinary science in South Africa and founder of the Onderstepoort Veterinary Institute and the Faculty of Veterinary Science of the University of Pretoria. The objective of the Trust is to promote veterinary science in southern Africa by means of grants to outstanding candidates—independent of race, sex, creed or nationality—for study, research, travel or any other activity which would further this purpose.

The Trust committed itself to sharing the considerable expertise in veterinary science, accumulated over many years in South Africa, with its neighbours and other countries in Africa. To emphasize its African commitment, the Advisory Board of the Trust decided in 1993 to create a prestigious "Theiler Memorial Trust Award" in recognition of outstanding scientific achievements in the field of veterinary science that promote the eradication or control of animal diseases in Africa.

Professor Alain Provost is eminently suited to be the second recipient of this award. As indicated in his *curriculum vitae*, he devoted 21 years of his life to the study and control of animal diseases in Africa, first as a researcher and later as Director of the Laboratory for Veterinary and Animal Husbandry Research in Farcha, Chad, and as the Regional Director of IEMVT in Central Africa. This was followed by 11 years in Paris as Director of the IEMVT, the French organization dedicated to research on, and control of animal diseases in tropical countries.

Initially his main interest was virology, a subject in which he received specialized training at the Pasteur Institute. However, on his arrival in Chad in 1955, his first assignment included, besides production of rinderpest vaccine, the

development of a vaccine against lung sickness or contagious bovine pleuropneumonia (CBPP), a disease completely unknown to him at that stage. Within a week of his arrival he already experienced an outbreak of the disease, and within 2 years he developed a vaccine which was superior to anything available at that time.

This success, and his exposure to all the leading experts on CBPP at an international conference in Khartoum in 1959, probably decided his future. Eventually he was recognized as the leading expert on lung sickness in Africa. We had the privilege of listening to his Theiler Memorial Lecture on the distribution and control of the disease in Africa, but in order to put his own contribution into perspective, one must be aware of the early history of the disease.

CBPP has probably been prevalent in Europe for several centuries. During the 19th century it spread from there to the USA, Australia and New Zealand but was eradicated by strict zoosanitary measures. In 1854 it was introduced to South Africa by a bull imported from Holland. The infection rapidly spread throughout southern Africa, facilitated by the predominance of ox-wagon transport, and within 2 years over a hundred thousand animals died. Before the rinderpest epidemic of 1896, it was considered to be the economically most important animal disease in South Africa. Eventually it was eradicated from Zimbabwe in 1904, from South Africa in 1924 and from Botswana in 1939, but it remained endemic in northern Namibia, Angola and other countries further north.

At present, CBPP is prevalent, either sporadically or endemically, in 24 African countries. The recent spread of the disease to Botswana and Tanzania has received wide publicity, both because of the threat to the other countries in our region and of the enormous costs involved in containing—and hopefully eradicating—it from Botswana again by means of a test and slaughter campaign.

The obvious question is whether there is any hope of completely eradicating the disease from the continent of Africa. Prof. Provost believes it can be done. In his experience, the persistent application of strict control of cattle movement combined with blanket vaccination campaigns, has led to effective control in West and East Africa, and to eradication in southern Africa. A key factor in this approach is, of course, the availability of an effective vaccine, and this is a field in which Prof. Provost has made major contributions. Over decades he was involved in the development of both the mild KH₃J and the more virulent T₁/44 attenuated strains of the causal organism. These strains have widely been used as vaccines. He also conceived the idea of a combined vaccine for CBPP and rinderpest and later, in collaboration with a colleague in Paris, developed streptomycin resistant derivatives of both strains which have been used for many years. He was also instrumental in developing critically important production techniques to ensure an effective end-product.

No wonder that Alain Provost is affectionately known in international circles as the "grandfather" of CBPP research in Africa; no wonder that he is still, almost 10 years after his retirement, a consultant for various international bodies on the control of the disease.

In presenting you with the Theiler Memorial Award, Prof. Provost, we honour you as a leader in your field and express our appreciation for your contribution to the never-ending war against animal diseases on our continent.

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