

Arnold Theiler

AN INSPIRING MEMORY

A hundred years ago, on March 26, 1867, Arnold Theiler was born in the village of Frick, Canton Argau, Switzerland. This number of the Onderstepoort Journal of Veterinary Research is dedicated to his memory. This is indeed fitting as he was the founder of the Onderstepoort Veterinary Research Institute and his name has become legend in the annals of veterinary research.

Theiler was born into an era of rapid expansion of human knowledge, which by cumulative acceleration has reached the explosive dimensions of today. To him and his contemporaries must go much of the credit for laying the foundations of modern science.

Theiler's inherent interest in nature and biology was encouraged by his father who was a science teacher. He graduated from the veterinary college of Zürich at the age of twenty-two. Two years later he arrived in the Transvaal. We do not know what prompted him to emigrate to what was then a little known, undeveloped and far off land. We can only record the fact with local pride.

The latter half of the nineteenth century was the period when men like Manson, Hansen, Pasteur, Koch, Lister, Laveran, Smith, Kilbourne, Bruce, Iwanowsky and others were revolutionizing the concepts of the infectious nature of disease and the scientific world was ringing with their discoveries and disputes. Africa, up to then the "Dark Continent", was also experiencing a scientific invasion. Diseases of man and animals, peculiar to the continent, were being studied in the light of the new knowledge but Theiler remained frustrated in Pretoria, his potential unappreciated. While working on a farm to augment his slender income, he lost his left hand but never allowed this disability to affect his outlook or work. The dummy hand he wore in a leather glove became as characteristic a feature as his stocky build, firm but kindly face and slightly guttural English accent.

Theiler's first opening came in 1893 when smallpox broke out in the booming mining town of Johannesburg, and he was commissioned to prepare lymph for a mass vaccination campaign. That an alien veterinarian should have been chosen to make a vaccine for use on humans, albeit from animals, must bear witness to the scientific training he had received, and his personality which must have instilled confidence in his ability. Thanks mainly to his efforts the outbreak was brought rapidly under control.

Three years later, in 1896, rinderpest invaded southern Africa from the north and Theiler was summoned by President Kruger to take charge of the campaign against the disease in the Transvaal. The story of the heroic struggle of Theiler and his illustrious colleagues, including Koch and Bordet, during this catastrophe is veterinary history and need not be repeated here.

Theiler's efforts in the rinderpest campaign convinced the Transvaal government of his personal ability and of the value of veterinary science and research. In 1896 he was appointed as State Veterinarian and in 1898 was given a small laboratory at Daspoort, near Pretoria. Theiler's research career was now launched but the following year hostilities broke out between Britain and the South African Republics. Theiler was commissioned in the Transvaal artillery.

After the occupation of the Transvaal by the British, Theiler was reappointed as "Government Veterinary Bacteriologist" and continued his work at Daspoort.

In 1908, Theiler and his staff occupied the new veterinary laboratory which had been erected by the Transvaal government at Onderstepoort seven miles north of Pretoria. This was the institute with which his name was to become so firmly linked.

Theiler lived in the days before intensive specialization in veterinary science, when the fields open for investigation were legion. One extraordinary aspect of the man was his versatility in almost all branches of his profession. It is difficult to state whether he was better known as a virologist, protozoologist, bacteriologist, helminthologist or pathologist. Among the virus diseases his work on horse-sickness and bluetongue is classical. Of similar reputation are his investigations into East Coast fever, anaplasmosis, and the babesioses. He worked on numerous bacterial diseases and was an ardent helminthologist. Overseas at least, he is probably best known for his work on bone pathology. In addition he investigated numerous conditions caused by poisonous plants and was no mean botanist.

With the steady growth of Onderstepoort under Theiler, the reputation of the institute and its director became world wide. One instance of his standing in his own country is the fact that he was appointed to a commission to investigate the influenza epidemic which raged through South Africa in 1918. That a veterinarian should be consulted on a human disease at such a level and at that comparatively early time in his career, is proof of the eminent position he had attained in the medical sciences. The part he played on the commission further enhanced his standing.

In 1920, largely due to Theiler's influence, a veterinary faculty was created at Onderstepoort, a faculty which was to share the world wide reputation of its first dean, Theiler, and the institute he had founded. It was probably in teaching that Theiler reached his greatest heights as befits one who was not only a great scientist but also a great man. He is still revered by those earlier students who were fortunate enough to sit at his feet.

While speaking of Theiler, the man, we must record something of his family. He married a school mate, Emma Sophie Jegge in 1893 and she became his constant companion and helpmate for the rest of his life. During the early lean years she acted not only as wife and mother but also as laboratory assistant and secretary. They had two sons and two daughters. The eldest son, Hans, became a veterinarian while his brother, Max, took up medicine. Max was awarded a Nobel prize in 1951 for his outstanding work on yellow fever. The younger daughter, Gertrud, is an acarologist of international repute while the elder, Margaret, entered the field of education. All his children, therefore, followed their father's footsteps in one or other of his various fields of activity.

Theiler became a world-wide figure, and received numerous honours in his lifetime. He attended many world conferences, his first being the 7th International Veterinary Conference held at Baden-Baden in 1899. He was made Chevalier de l' Ordre de la Couranne Belgique in 1912 and Knight of the Order of St. Michael and St. George in 1914. In addition he received honorary doctor's degrees from the Universities of the Cape of Good Hope (1911), Syracuse, Bern, South Africa, Witwatersrand, Cape Town and Utrecht.

He died in London in 1936 where he was to attend the Second International Microbiological Congress at which his son Max was to be a speaker.

At this distance, one hundred years after his birth and thirty-one years after his death, we must pause to consider why he is still to us such a living memory. By "us" I mean not only those who had the privilege to know him personally but the veterinary profession of South Africa as a whole, the present student body and many others, both in this country and abroad. We do not pay homage to his scientific work alone, great as it was. Advances have been made on almost all his findings as he himself would have wished. Inevitably, some of his work has been superseded but the fact that new highways are built over, and aften deviating from, the tracks of the pioneers in no way detracts from the honour due to them. They identified the goal and showed the way. The memory of Arnold Theiler is bright because of his intense devotion to his work, his amazing powers of observation and his enthusiasm, but above all to his extraordinary power of stimulating these qualities in others. His memory is still an inspiration to many too young ever to have known him.

We dedicate this volume to his memory in the sure knowledge that it will long remain an inspiration to the veterinary profession.