



Onderstepoort residence centenary celebrations

Written by Annette Boshoff and Heloise Heyne of the Veterinary History Society of South Africa

Sir Arnold Theiler inaugurated the new student residence at Onderstepoort on 14 April 1924. To mark the historic occasion, the weekend of 5 and 6 April 2024 was set aside for celebration.

Talks, tours and sundowners on Friday 5 April

A truly magnificent day was hosted by a smooth operating team consisting of the houseparents, Tiaan and Alischa Henning, the House Committee, with Marnus Zaaiman BVSc V in charge, and the Centenary Committee. The events on Friday 5 April entailed a visit to the South African National Veterinary Museum, CPD talks on the history of babesiosis research from the perspective of a parasitologist and a clinician, a visit to the Onderstepoort skills laboratory and an alumni dinner at the OP Village Clubhouse. The festivities continued on Saturday with a festival on the sports field and a walk down memory lane in the Common Room.

Smallpox, rinderpest and Theiler

A select group of alumni attended the events Friday afternoon that were kickstarted with a visit to the South African National Veterinary Museum, guided by Heloise Heyne of the Veterinary History Society. Heloise, who had worked as a veterinary technologist in acarology at the Onderstepoort Veterinary Institute for 48 years, was a member of the committee that established the museum and was also the first curator thereof. Heloise, ably assisted by Dr Antoinette van Schalkwyk who is the current curator of the museum, regaled the group with stories about smallpox, Theiler and rinderpest. A walk through the exhibition relating the history of veterinary science in South Africa, the Theiler rooms, a laboratory and a small-animal consulting room of yesteryear enlightened and delighted.



Visit the website of the Veterinary History Society of South Africa for the full story: <https://vethistorysa.co.za/>
To become a member of the Society, send an email to: Prof Gareth Bath at gfbath@gmail.com

Oriental spices, the French Revolution and Babesia

Not to be outdone by Heloise, Prof Banie Penzhorn then presented an intriguing talk on the history of babesiosis – taking his audience along a captivating route.

He started with oriental spices and the European trade monopoly of the Merchants of Venice from the 11th to the 15th century.

Next up was the exploration of the African continent by the Portuguese in the 15th century, the establishment of a refreshment station by the *Verenigde Oostindische Compagnie* of the Dutch at the Cape in 1652 and the French Revolution of 1789.

The following stop was Lady Anne Barnard and her English pedigree dogs in the Cape in 1797. This is linked to an important discovery by Victor Babès, a Romanian bacteriologist. In 1888, he found the pear-shaped bodies on a blood smear of a cow suffering from a disease now known as babesiosis. If you would like to know how oriental spices, the French Revolution and *Babesia* are connected, you will have to book Banie for your next CPD event. The take-home message, delivered in Banie's eloquent and inimitable style, was that researchers had overlooked or ignored previous work for 50 years at their peril.



For a good read on the subject, see: Penzhorn (2020) Don't let sleeping dogs lie: unravelling the identity and taxonomy of *Babesia canis*, *Babesia rossi* and *Babesia vogeli*. <https://doi.org/10.1186%2Fs13071-020-04062-w>

Immunity, clots and cytokines

Next up was Prof Johan Schoeman, who detailed the history of babesiosis research from a clinician's perspective. South African veterinarians grappled with feline nuttalliosis and canine malignant jaundice, bilious fever or malarial fever of the dog (as it was referred to in the past), from when Duncan Hutcheon, the Government Veterinary Surgeon of the Cape Colony first encountered the disease in dogs in Port Elizabeth in 1885.

Theiler wrote about the disease in his first report as the Government Bacteriologist of the Transvaal in 1904. Since then and up to this day, babesiosis has intrigued clinicians in South Africa and many papers on the pathophysiology and manifestations of the disease

have been published by private practitioners, state veterinarians and researchers at Onderstepoort over the past 120 years. Through a citation software programme called VosViewer, Johan highlighted the centrality of the South African researchers and their work done on canine babesiosis.

Like Banie, Johan showed that later researchers also overlooked the work done by their colleagues of the past. For example, Malherbe did a doctoral study on all the clinicopathological changes in the 1950s.

He noted that dogs left untreated can make a full recovery. This finding, coupled with those of Theiler in 1904 in which he demonstrated immunity in older dogs, was not cited in later articles on asymptomatic carrier status. Moreover, both the nervous and the chronic forms of the disease were described by Malherbe and Parkin in 1951 in which they made mention of the similarities to human malaria - another paper overlooked in later studies.

Johan finished off with a culmination of studies in which the genomic, cytokine, coagulation and endocrine changes in this disease firmly established canine babesiosis as a significant animal model of acute inflammatory disease.

Top marks go to Dr Katja Bier who paid attention for the full duration of the two presentations and also asked *excellent questions!*



For another good read, see: [Leisewitz, et al. \(2019\) A clinical and pathological description of 320 cases of naturally acquired Babesia rossi infection in dogs.](#)

<https://doi.org/10.1016/j.vetpar.2019.06.005>

Woolly sheep, more mannequins and a dystocia

Xander Juhl-Jürgens, Dirk Wijnbeek and Salmo Cilliers of the House Committee then took the group to the skills laboratory to see how the current students of Onderstepoort get to play around before they are let loose on real animals.

Johan noted that the skills laboratory at Onderstepoort is the best in the world and Banie demonstrated handling a bovine dystocia like a pro, harkening back to his initial appointment at the Faculty in the Department of Theriogenology, despite being a renowned veterinary parasitologist for the past 40 years. A man of many talents!

The Onderstepoort Skills Lab acquired top-of-the-range large-animal models but also produces its own animal simulators through in-house model development. The laboratory was officially opened on 16 April 2015. Liezl Kok is an artist who has been involved from the start in developing the artificial skins, cotyledons, veins etc.



Read more on the Onderstepoort skills laboratory at: <https://www.up.ac.za/production-animal-studies/news/post-2069025-new-skills-laboratory-huge-boost-for-clinical-training-in-faculty-of-veterinary-science>

Sunset, G.O.A.T. centenary wine and dinner at the OP Clubhouse

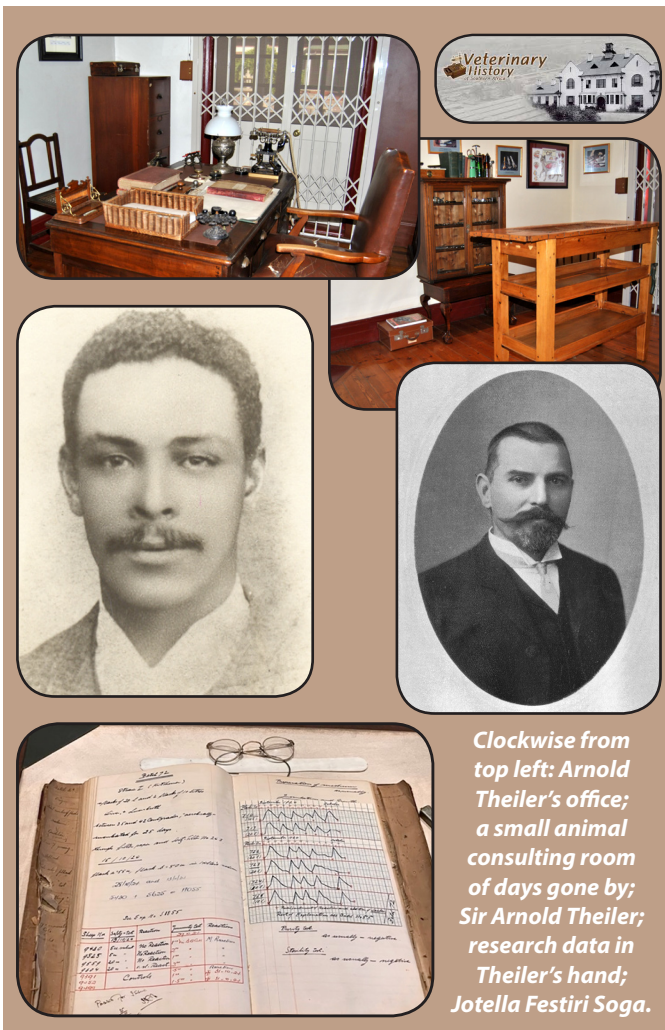
The highlight of the day was the Alumni Dinner hosted in great style by Paballo Lekgate of the House Committee of OP Village. Black tablecloths, fairy lights and a perfect ambience on the lawn by the Clubhouse and swimming pool set the scene for a memorable evening. The food was delicious, the G.O.A.T. centenary wine excellent, the company charming and the sunset divine.

Prosch to the next century!



Heloise Heyne, tour guide for Onderstepoort Residence alumni at the South African National Veterinary Museum on 5 April 2024.





Clockwise from top left: Arnold Theiler's office; a small animal consulting room of days gone by; Sir Arnold Theiler; research data in Theiler's hand; Jotella Festiri Soga.

Oriental spices, the French Revolution and Babesia: What is the connection?

- Arrived at the Cape, 04 May 1797; wrote shortly afterwards:
- "Our dogs ... were met by the prophecy of a short life ... *English dogs rarely live* ... cause of death ... eating of a certain indigestible grass (!) ... to *tie up the others* ... so as yet we have saved some."



CANINE BABESIOSIS REVISITED

- C.P. Lounsbury, Government entomologist, Cape Colony
- 1901: Identified vector

ENTOMOLOGY

Transmission of Malignant Jaundice of the Dog by a Species of Tick.

J.L. S.A.V.M.A.
V (3)1934.

An Attempt to Transmit Canine Biliary Fever to the Domestic Cat.

By A. D. THOMAS, D.V.Sc., and M. H. V. BROWN, B.V.Sc., Onderstepoort.

ATYPICAL SYMPTOMATOLOGY IN BABESIA CANIS INFECTION

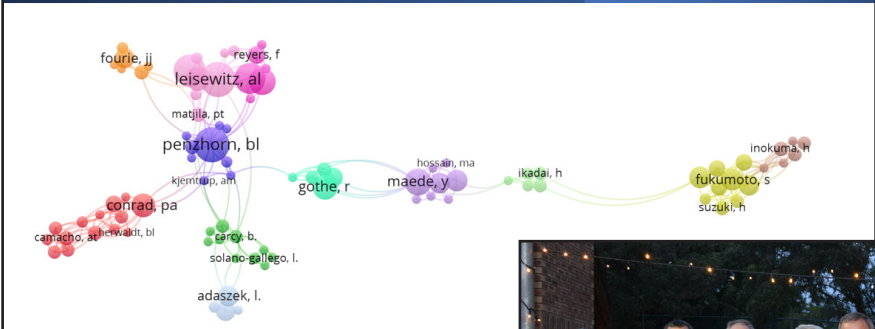
W. D. MALHERBE and B. S. PARKIN
Onderstepoort

J. S. Afr. vet. med. Ass. 35 (1) 196

THE CEREBRAL FORM OF BABESIOSIS IN DOGS

H. BOTHA — Private Practitioner, 79 Havelock Street, Port Elizabeth.

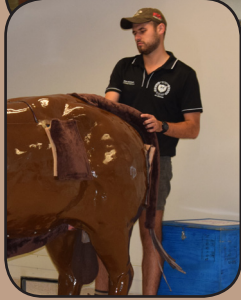
Canine and feline babesiosis: map of publication output and co-authorship networks



VosViewer map of the publication output worldwide on canine and feline babesiosis, depicting the co-authorship networks. (Annette Boshoff, 2019).

Alumni at the OP Village Clubhouse: front row from left to right: Alnora le Riche, Kathy Mouzoures, Katja Bier, Peter Kirchner, Quixi Sonntag, Maryke Henton, Naomi Penzhorn and Johan Schoeman; back row from left to right Kabols le Riche, Thinus Naudé, Jakob Hayes, Hannes van Zyl, Fanus Kritzinger, Andrew Comins, Patricia Reeve and Banie Penzhorn (absent for the photo Victor Luus, Heloise Heyne, Antoinette van Schalkwyk and Annette Boshoff).





Above: Alumni and House Committee members in the skills lab at Onderstepoort, with Dolly the sheep listening in. To the left: Dirk Wijnbeek, House Committee member 2023/2024 perfects his practical skills. Below from left to right: Patricia Reeve and Andrew Comins who graduated in 1998 and 1996 and whose son, Greg, is now a final year veterinary student at Onderstepoort; Victor Luus, BVSc 1984, and his colleagues taking one of the haptic cows for a walk? This lady is worth a million Rand.



Above: Banie Penzhorn with Peter Kirchner, Maryke Henton and Katja Bier looking on; Katja Bier, the smart kid in the class on this day; four friends who were neighbours in Old Res in the late 1980s: Kabols le Riche, Fanus Kritzinger, Jakob Hayes and Johan Schoeman, catching up on lost time.



Alumni Dinner hosted in great style by Paballo Lekgate of the House Committee of OP Village on the lawn by the Clubhouse and swimming pool: delicious food, excellent G.O.A.T. centenary wine and charming company.

