



University of
Zurich^{UZH}

University of Bern | University of Zurich

vetsuisse-faculty

The Swiss Connection

Arnold Theiler and Swiss colleagues an early example of a successful international veterinary cooperation

Andreas Pospischil

Prof. emeritus, Institute for Veterinary Pathology, Zurich, Switzerland,
Swiss Association for History of Veterinary Medicine

The Swiss Connection

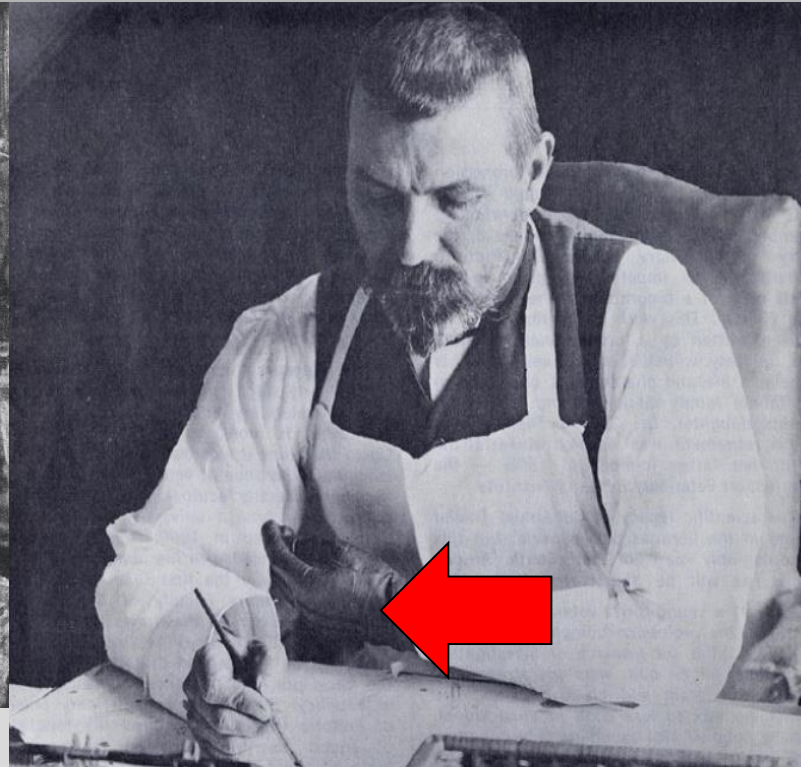
- Introduction
- Theiler`s Swiss team
 - Prior to 1908
 - 1908 - 1914
 - 1920 -

Arnold Theiler:

- Veterinary studies at Bern and Zurich 1887-1889
- 1889: Veterinary practice at Beromünster, Switzerland unsuccessful
- 1891: Departure to Transvaal, first attempt to run a veterinary practice
- On the job training working as a farm hand at the local farm Doornkloof.
- An accident made him loose his left hand in a chaff cutter, he tried to hide the artificial hand he received for the rest of his life



Theiler and his «Bierbrüder» in Zurich 1888



1897 /1898: Zurich veterinary students and Prof.
Erwin Zschokke (1)





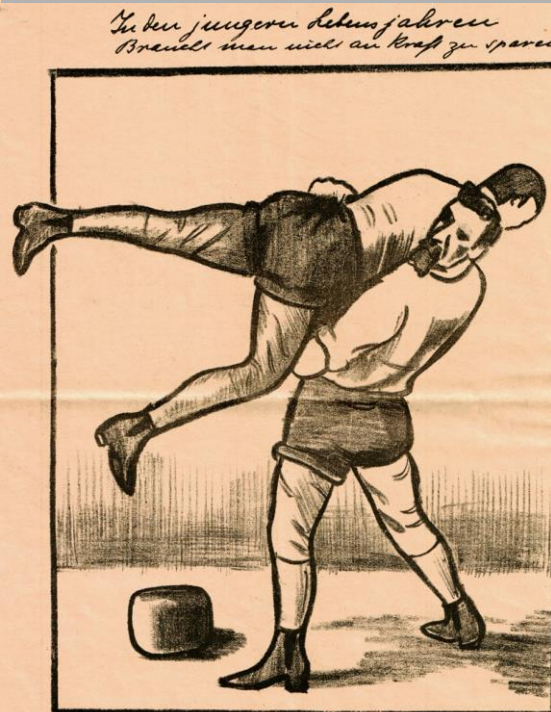
Prof. Erwin Zschokke, Zurich:

- Highly influential on Theiler
- They kept lifelong contact
- Students admired and loved him and called him «Papa Zschokke»
- During his young years he practiced "Schwingen" and "Steinstossen"
- In 1916 he became the 1st veterinarian as Rector of the University of Zurich

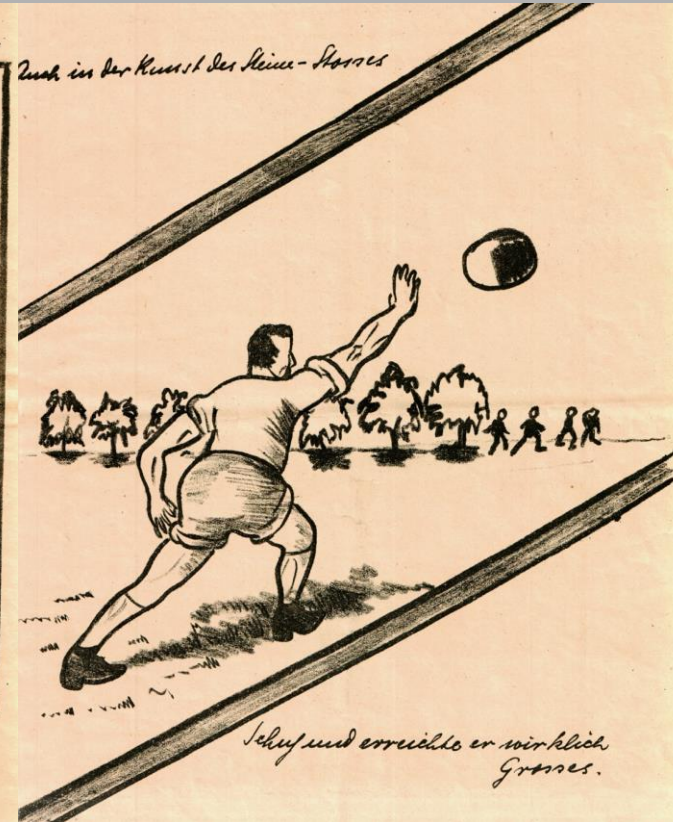
Erwin Zschokke (1855-1929)



PAPA ZSCHOKKE.



Man sieht Erwin Zschokke sich
In der Schwingkunst fürchterlich.



Schuf und erreichte er wirklich
Grosses.

1893: Theiler successfully produced smallpox vaccine for an epidemic in Johannesburg



The Swiss Connection

- Introduction
- Theiler`s Swiss team
 - Prior to 1908
 - 1908 - 1914
 - After 1908

Swiss working with Arnold Theiler on smallpox vaccine

name	function	year
Brenzikofer, A.	assistant for the production of small pox vaccine	1898
von Bergen, Alfred	assistant for the production of small pox vaccine	1898
Favre, Charles	assistant for the production of small pox vaccine, assistant at Daspoort	1898, 1904
Schroeder, D.G.I.G.	assistant for the production of small pox vaccine	?
von Berlacher, ??	assistant at Daspoort	1904

Charles Favre (veterinary graduate Bern 1897)



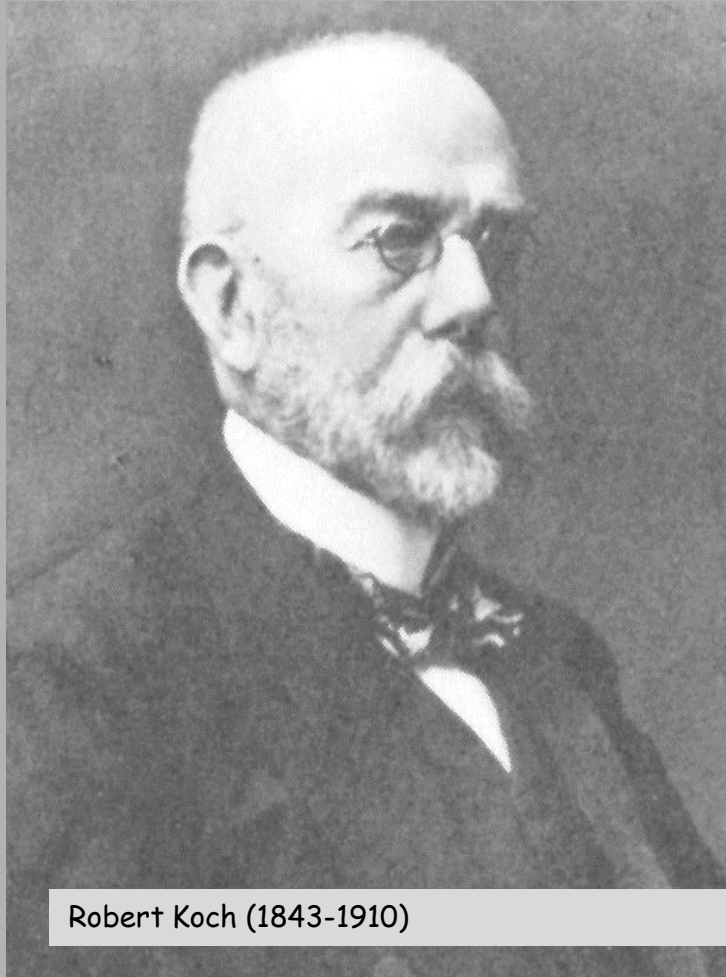
Theiler

Favre

Rinderpest in Southern Africa (1896)



In 1896 the Cape Government called for international help to fight the rinderpest epidemic, the German Imperial Government sent a team (Robert Koch and Wilhelm Kolle). De Beers Mining Company sponsored Koch.



Robert Koch (1843-1910)



Wilhelm Kolle (1868-1935)

They used a subcutaneous inoculation of bile from infected animals as vaccine and reported this method in 1897

Donnerstag

№ 15.

8. April 1897.

DEUTSCHE
MEDICINISCHE WOCHENSCHRIFT.



Mit Berücksichtigung des deutschen Medicinalwesens nach amtlichen Mittheilungen, der öffentlichen Gesundheitspflege und der Interessen des ärztlichen Standes.

Begründet von Dr. Paul Börner.

Dreiundzwanzigster Jahrgang.

Redaction: Geh. Med.-Rath Prof. Dr. A. Eulenburg und Dr. J. Schwalbe, Berlin. — Verlag: Georg Thieme, Leipzig.

Lichtensteinallee 3.

Am Karlsbad 5.

Seeburgstr. 31.

INHALT.

- Originalartikel:** I. Prof. Robert Koch's Berichte über seine in Kimberley ausgeführten Experimentalstudien zur Bekämpfung der Rinderpest.
- II. Aus dem Universitätslaboratorium für Pathologie in Florenz: Versuche mit Pestschutzimpfungen. Von Prof. Dr. A. Lustig und Dr. E. Galeotti.
- III. Aus der Universitäts-Augenklinik in Bern: Centrale beiderseitige Amaurose infolge von metastatischen Abscessen in beiden Occipital-lappen ohne sonstige Heerdsymptome. Von Dr. H. Heinersdorf, chem. Ass.-Arzt.

- IV. Polymyositis acuta und acuter Gelenkrheumatismus. Von Dr. H. Risse in Petersthal.
- V. Zur Serumdiagnose des Typhus abdominalis. Von Dr. E. Ziemke in Berlin.
- VI. **Öffentliches Sanitätswesen:** Die Curpfuschereifrage nach den Beschlüssen des internationalen hygienischen Congresses in Budapest. Von Geh. Med.-Rath Dr. O. Schwartz in Köln.
- VII. **Correspondenzen und Erwidern:** Ueber Entfernung von Metallsplittern aus dem Augengrunde. Berichtigung von Geh. Med.-Rath Prof. Dr. Hirschberg in Berlin.
- VIII. **Kleine Mittheilungen.**

I. Prof. Robert Koch's Berichte über seine in Kimberley ausgeführten Experimentalstudien zur Bekämpfung der Rinderpest.')

Kimberley, den 9. December 1896.

An den Staatssekretär der Landwirtschaft, Capstadt.

Sir, ich gebe mir die Ehre, Ihnen über meine bisherige Thätigkeit in Bezug auf die Erforschung der Rinderpest folgendes zu berichten:

Obduction beendet war, um 12¹/₂ Uhr
niere, welche krank waren, und wurde
obduciert. Die genauere Durchsuchung
des Organismus charakteristischen Organveränderungen der
Rinderpest in einem verhältnissmässig frühen Stadium. Von beiden
Thieren wurden Blut, Speichel und Stückchen aus den Organen ge-
sammelt und aufgehoben, theils feucht, theils trocken. Am Nach-
mittage sahen wir uns fünf Stück Rindvieh an, welche mittlerweile
vom Kaphirkraal, der westlich von der Eisenbahnstation Taungs liegt,



The Institute Pasteur, Paris sent a team (Jules Bordet, Jan Danysz) to the Transavaal for 12 months

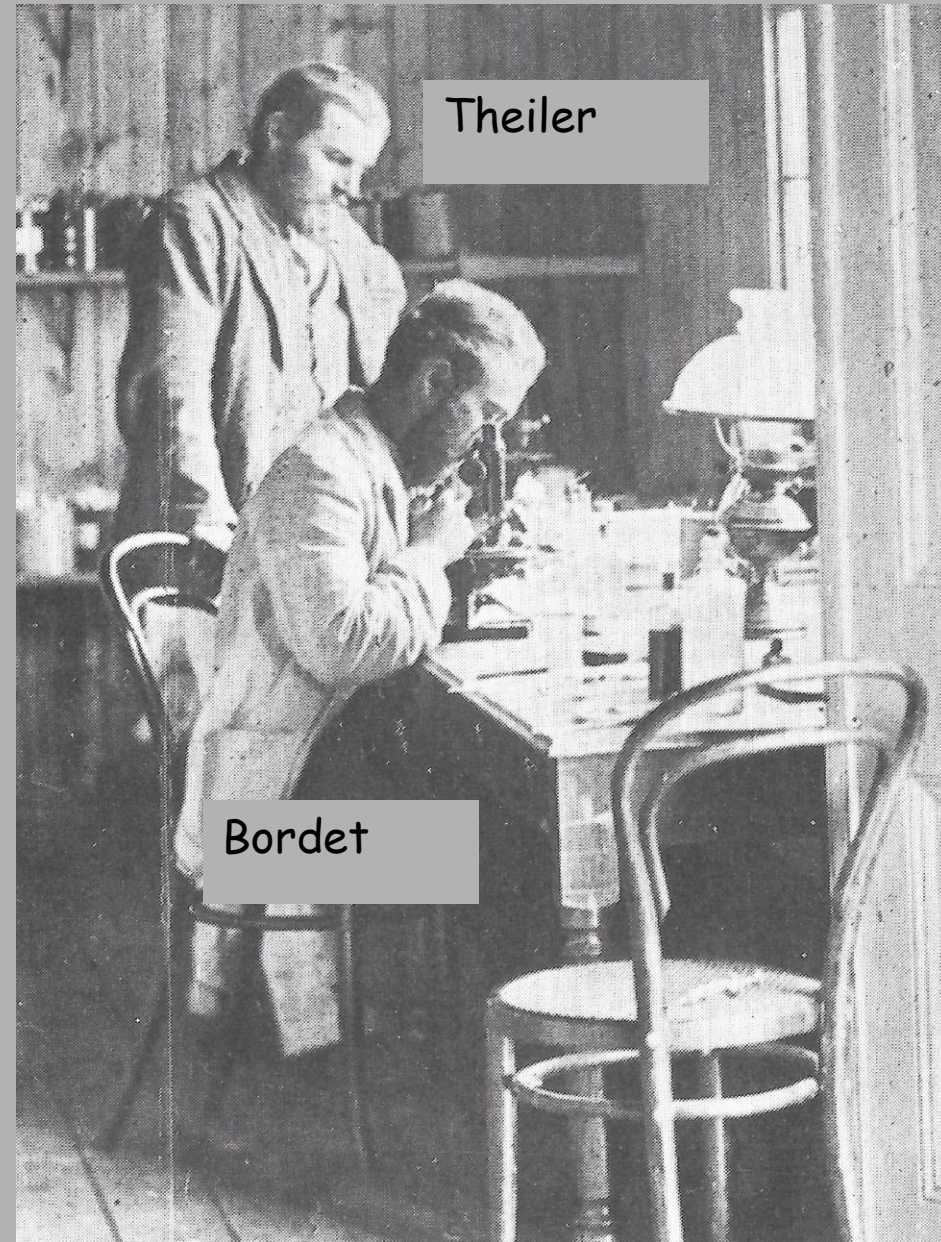


Jules Bordet (1870-1961)



Jan Danysz (1860-1928)

This team focused on serotherapy collecting sera from surviving animals for passive immunization. Theiler adapted this method for future use.



1899: Theiler was sent as official delegate to the 7th International Veterinary Congress at Baden-Baden, Germany. He visited family, Erwin Zschokke, Robert Koch and the Institute Pasteur Paris

1899: Back to South Africa: participation in the 2nd Boer War



XIII. Jahrgang.

№ 8.

Schweizerische Monatschrift für Offiziere aller Waffen

Abonnementspreis 5 Fr. per Jahr franko per Post durch die ganze Schweiz; für das Ausland kommt bei direkter Zusendung der entsprechende Portozuschlag dazu.
Insertionspreis der zweigespaltenen Petitzeile 20 Cts.

Aus Transvaal.

Berichte von Dr. A. Theiler, Tierarzt in Pretoria.

Meinem ehemaligen Chef, Herrn Oberst Potterat, den Herren Offizieren des Instruktioncorps, den Kameraden der Aspirantenschule 1890 und den schweizerischen Kollegen überhaupt gewidmet zur freundlichen Erinnerung.¹

(Fortsetzung.)

Beobachtungen als Pferdarzt im Felde.

Dieselben waren mannigfaltig, aber keineswegs so eingehend, daß über die eine oder die andere Erscheinung einläßliche Untersuchungen möglich gewesen wären. Sehr enttäuscht war ich im ganzen Feldzuge über die Unmöglichkeit, eigentliche kriegschir-

The Swiss Connection

- Introduction
- Theiler`s Swiss team
 - Prior to 1908
 - 1908 - 1914
 - 1920 -



Transvaal Department of Agriculture.

THE

VETERINARY BACTERIOLOGICAL

LABORATORIES.

1910: Robert von Ostertag (1864-1940) sent by the Imperial German Government to the German colony Southwest Africa (Namibia) to eradicate sheep pox met Theiler at Onderstepoort and praised his success and the new laboratory in a book in 1912.



VERÖFFENTLICHUNGEN DES REICHSKOLONIALAMTS
Nr. 3

Das Veterinärwesen und Fragen der Tierzucht in Deutsch-Südwestafrika

Reisebericht

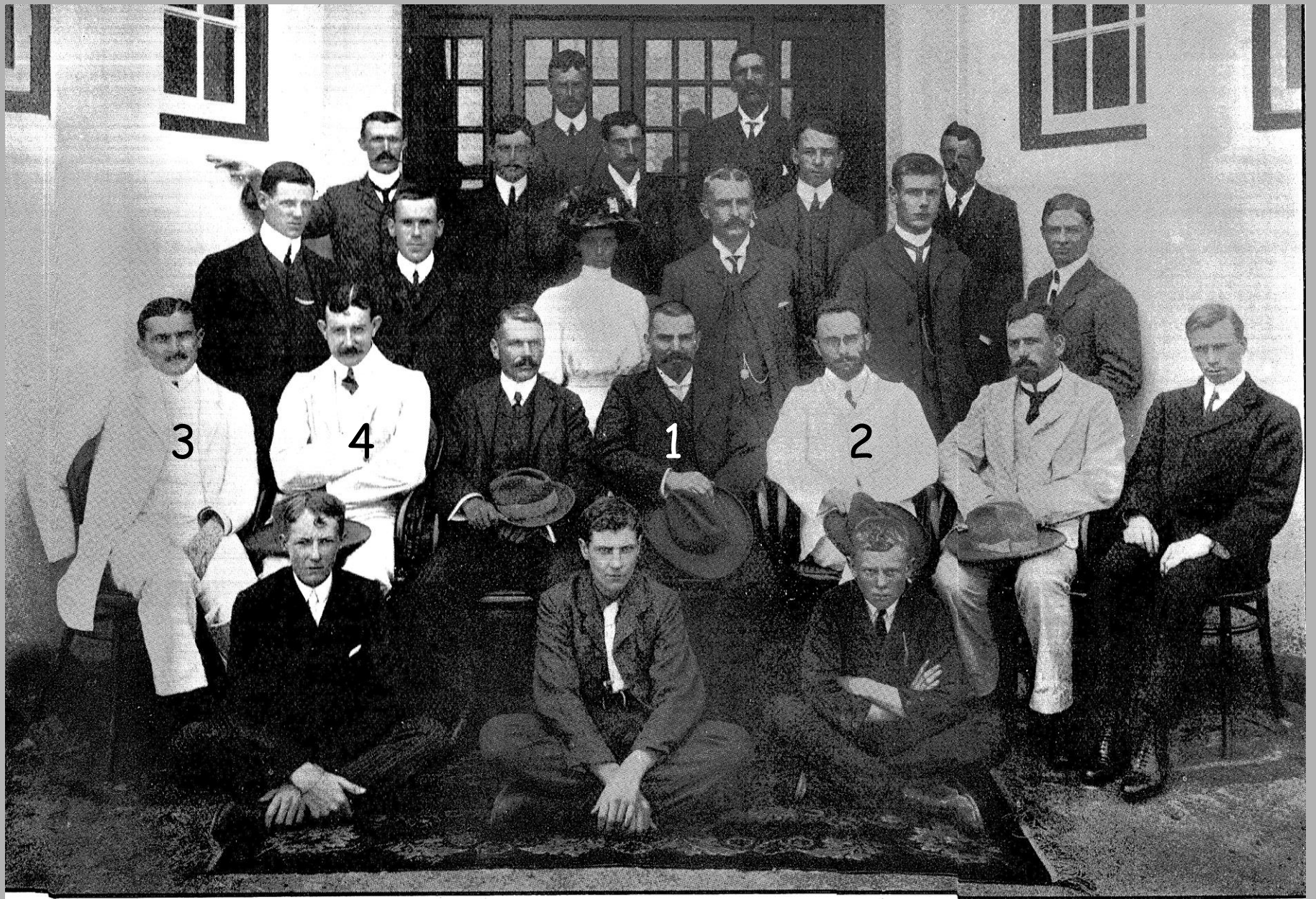
von

Prof. Dr. R. Ostertag

Geh. Regierungsrat und Direktor der Veterinärabteilung im Kaiserlichen Gesundheitsamt in Berlin.

Mit 87 Abbildungen im Texte





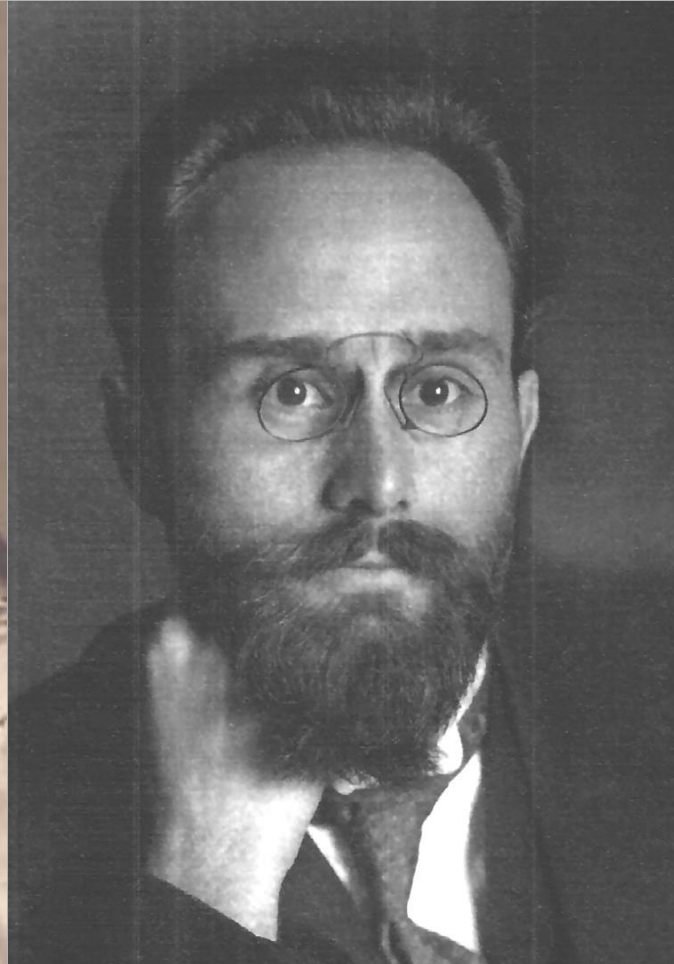
The Staff of the Veterinary Bacteriological Division.

1: Arnold Theiler, 2: Walter Frei, 3: K.F. Meyer, 4: James Walker

In 1905 Theiler hired from Switzerland for
the new laboratory :



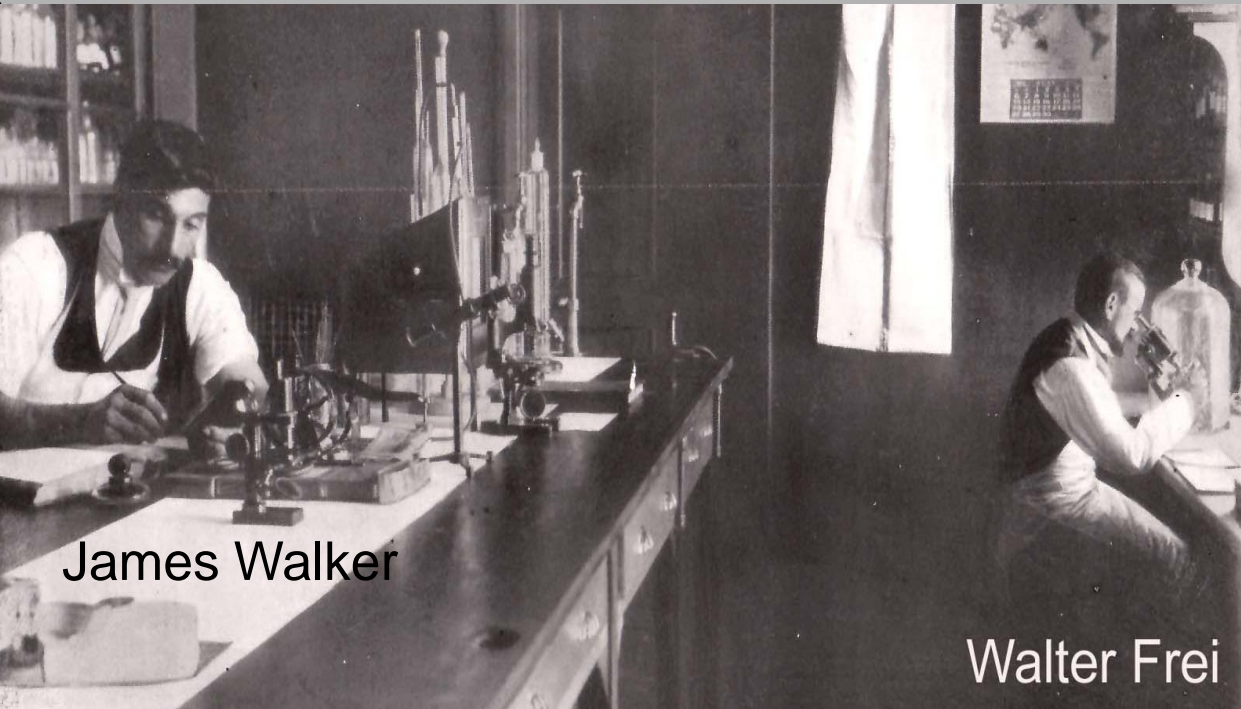
Karl Friedrich Meyer (1884-1974),



Walter Frei (1882-1972)

Walter Frei

- 1905: qualified from the Zurich Veterinary Faculty
- 1906: Dr. med. vet. Zurich
- 1907: Training to prepare rabies vaccine with Jules Bordet at the Pasteur Institute in Brussels arranged by Theiler
- 1907: Arriving at Daspoort production of this vaccine at the with the Pasteur vaccine strain
- 1908: At Onderstepoort in charge of the physical laboratory, working on horsesickness, piroplasmosis and lamsiekte.



James Walker

Walter Frei

- Frei's work was not highly appreciated
- Return to Switzerland in October 1910
- 1911 elected professor for veterinary pathology in Zurich, retirement in 1952

1932 /1933: James Walkers thesis on «Swine Fever» under the supervision of Walter Frei accepted by the University of Zurich



Worked in Prof. Dr. Walter Frei's laboratory & wrote a Thesis on B. a. Swine Fever which was accepted by the faculty for the degree of D. Sc. Zurich University; on my return to the Union of South Africa in March 1933 I accepted an appointment in the Bechuanaland Protectorate administration on Foot & Mouth Control duty.

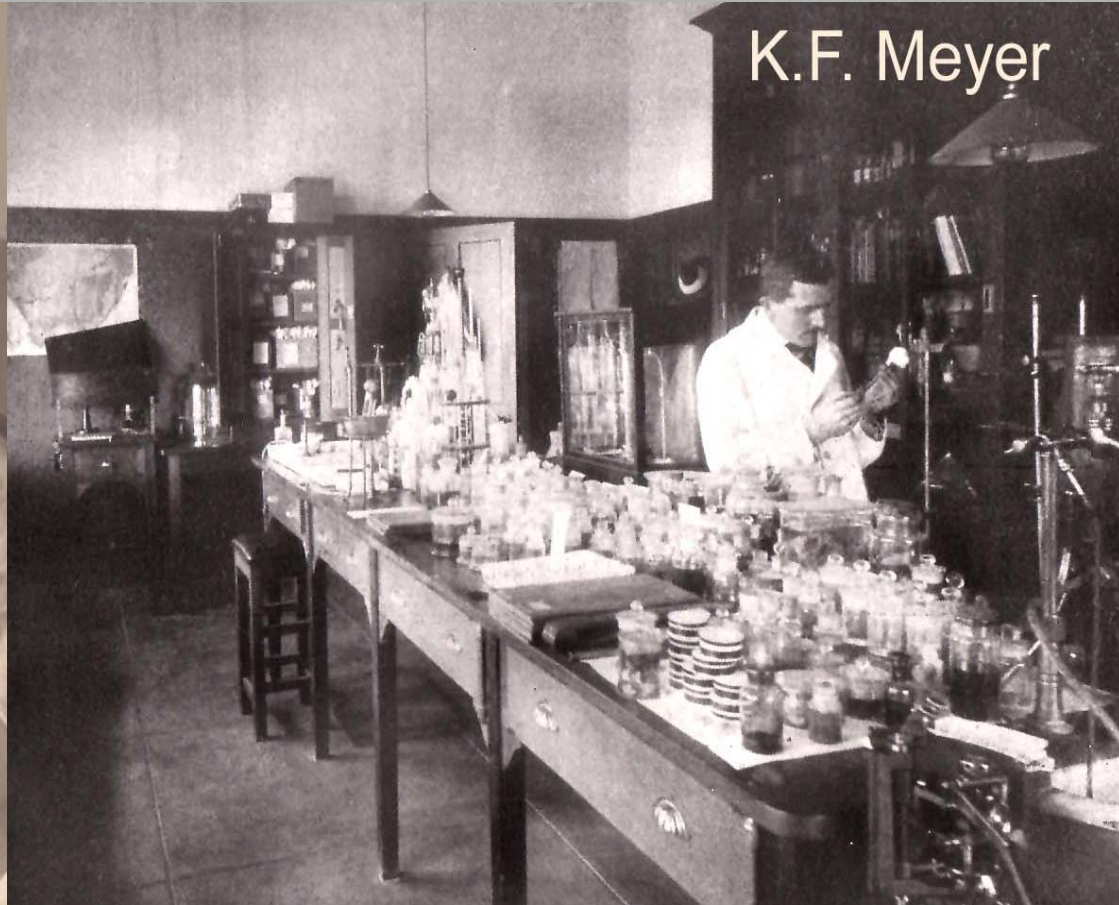
I have been occupied, for twenty five of the thirty seven years since graduating in investigating ^{Tropical} Veterinary diseases; it is gratifying to read the notable achievements which have been made in Tropical Veterinary Science, it is now possible to bring under control diseases which in former years crippled stock owners & made stock farming a hazardous industry.

I will always retain the happiest memories of my visit to Zurich & of my Professor & his staff. Courtesy & cordiality.

James Walker

Karl Friedrich Meyer (KF)

- 1907: qualified from Bern and Zurich Veterinary Faculty
- 1908: Dr. med. vet. Zurich
- 1908: At Onderstepoort in charge of the pathology laboratory



Karl Friedrich Meyer (KF)

- Until 1910 performing hundreds of routine diagnostic post-mortems. Publishing scientific reports without Theiler as co-author which caused a severe dispute among them.
- KF described the situation: "Theiler was a typical Lucerne square-head (although he was actually not from Lucerne but from Frick, Canton Aargau, Switzerland), and a Lucerne square-head cannot get along very well with a Basel square-head." as he ironically called himself self-critically.
- After an intermezzo as assistant professor of pathology and bacteriology at the School of Veterinary Medicine, University of Pennsylvania he became professor of bacteriology and experimental pathology at the University of California from 1913-1969.



Arnold Theiler (1867-1936)

- After W. Frei and K.F. Meyer left the laboratory Theiler was hurt by the "failure" of his Swiss recruits. In the pioneering days, his compatriots had served him well when he had engaged them as lay assistants and trained them as laboratory technicians (Gutsche).
- World War I brought a dramatic effect on the staff at Onderstepoort. Eight of Theiler's men had enlisted.
- Due to the obligatory military service in Switzerland no more applicants were available any more.

The Swiss Connection

- Introduction
- Theiler`s Swiss team
 - Prior to 1908
 - 1908 - 1914
 - 1920 -

In preparation for establishment of the Veterinary Faculty in Onderstepoort Theiler went to Switzerland in 1919 again to recruit veterinarians

name	training at	function	year	later
Werner Steck (1893-1977)	Veterinary medicine Bern (1917)	Research officer, lecturer in pathology	1922-1926	1926-1965: Professor internal medicine, pharmacology, equine medicine, Veterinary Faculty Bern
Gerhard G. Kind (1893-1942)	Veterinary medicine Zurich (1918), Dr. med. vet. Zurich (1922)	Research officer (anthrax laboratory)	1919-1922	private practice in Pretoria and Johannesburg (1922-1942)
Markus Zschokke (1893-1972)	Veterinary medicine, 1919, Zurich		1919-1922	State Veterinarian Southwest Africa (Namibia; 1926-1953 (1965)
Joseph R. Scheuber (1892-1975)	Veterinary Medicine, 1918, Zurich	Bacteriologists	1919-1952	
Hans (Jakob) Meier (1892-1975)	Veterinary Medicine, 1917, Zurich, Dr. med. vet. Bern 1919	Government Veterinary Officer	1919-1921	Return to Switzerland (1921); colonel cavalry Swiss Army

The Swiss connection continued for several years in reverse direction. Several newly appointed professors went to Switzerland for postgraduate training and further degrees.

name	Position (professor)	further training
A. Theiler (1867-1936)	Pathology, Tropical Medicine, Dean	Dr. med. vet. Bern (1901), Human pathology Basel (1927/28)
P.J. du Toit (1888-1967)	Infectious Diseases (1920-1948), Dean (1927-1948)	Dr. phil. (Zoology), Zurich (1912); Dr. med. vet., Berlin (1918)
H.H. Green (1885-1961)	Biochemistry (1920-1930)	University of Leipzig (biochemistry)
G. van de Wall de Kock (1889-1973)	Anatomy (1923), Pathology (1920- 1949)	Dr. med. vet., Bern (1921)
P.R. Viljoen (1889-1964)	Veterinary Science (1920-1933)	Dr. med. vet., Bern (1921)
E.M. Robinson (1891-1982)	Bacteriology (1920-1958)	Dr. med. vet., Bern (1921)

Robert Roessle (1876-1956) Professor of Pathology in Basel in an
obituary remembered Theiler`s time at Basel (1927/1928) :



"We had many discussions to find out how closely related and how different human and veterinary pathology are. He (Theiler) left a notice stating "I am attending (at Basel) the post-mortem-diagnoses, the conferences and demonstrations and I see, that I am learning daily."