

Archibald Sutherland Strachan (23 November 1891, Glasgow – 20 February 1949, Johannesburg)

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Archibald Sutherland Strachan, in conjunction with Dr FW Simson, and colleagues at the Miners' Phtisis Medical Bureau in Johannesburg, did pioneering work on the pathology of silicosis from the late 1920s until the early 1940s, which did much to elucidate the pathogenesis of the disease. This led to the detection of the disease in many other parts of the world where cases were recognised in workers in the mining industry, as well as in other industries where workers were exposed to silica dust. Their work also led to South Africa being recognised as the world authority on the disease. In addition, the high prevalence of iron overload in black South Africans, so-called 'Bantu Siderosis', was recognised for the first time by Strachan in 1929.¹

Strachan was born in Glasgow in 1891. He attended Glasgow High School, and entered the University of Glasgow where he completed the degrees of MA (Honours) and BSc in pure science. He pursued a degree in medicine and had a distinguished record as a medical student, graduating in 1918. He served for a short period in the Royal Army Medical Corps Special Reserve in the rank of Lieutenant towards the end of World War I. Thereafter, he returned to Glasgow where he joined the staff of the Department of Pathology, under Sir Robert Muir.

In 1919, he came to South Africa to the Department of Pathology and Bacteriology at the University of Cape Town for a period of two years. At the request of the previous head of department, he returned to the University of Glasgow and became a Senior Lecturer in Pathology. In 1924, he returned to South Africa as a senior pathologist at the South African Institute for Medical Research (SAIMR), and Senior Lecturer in Pathology at the University of the Witwatersrand where he was appointed Professor of Pathology in 1943. The following year, in 1944, he was appointed dean of the Wits Faculty of Medicine for a year.

Strachan was awarded the Doctor of Medicine (MD) degree by the University of Glasgow in 1929 and, in 1934, obtained membership of the Royal College of Physicians (London).

Strachan's research focused primarily on silicosis and led, to a large extent, to the First International Conference on Silicosis in Johannesburg in 1930.² The Conference was jointly sponsored by the International Labour Organization (ILO) and the Transvaal Chamber of Mines, and was an important moment in the history of silicosis. South Africa's achievements in terms of research, data collection and state regulation were acknowledged and discussed. Those data included the world's largest collection of X-rays of a workforce. The gold mines also assembled dust samples: by 1925, more than 100 000 samples were being analysed annually. The ILO, which was founded in 1919, hoped that the Conference would establish a global network of health specialists for the purpose of promoting workplace reform.



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Leading scientists from South Africa, the USA, Germany, Belgium, Italy, the UK and Australia met to discuss their research. The Conference participants agreed on the following points concerning the pathology and diagnosis of silicosis: a definition of what constitutes silicosis as an occupational disease (and, therefore, compensation to be claimed when diagnosed); a common terminology for the description of the characteristic lesions and varieties of silicosis; and a common terminology, descriptive of the various types of radiographic changes found in cases of silicosis. Delegates also agreed on the need for a universal standard of dust measurement so that risks in different industries could be compared.

In 1933, the ILO revised the Convention on Occupational Diseases and, in 1934, silicosis was added to the schedule of diseases for which compensation should be paid.

Prof. Strachan was known as a brilliant teacher and was in the unique position, in South Africa, of having been intimately concerned with the Departments of Pathology at three medical schools, almost since their inceptions. He was an external examiner at the University of Cape Town from 1924, and at the Medical Faculty of the University of Pretoria from 1945. He was also an external examiner of research in pathology at the veterinary laboratory at Onderstepoort. His services as an examiner and his many other roles at the University of Pretoria were recognised by the conferral of an Honorary MD in 1948.

Strachan was the doyen of pathological anatomists in South Africa. Official positions he held included member of the Federal Council of the South African Medical Association; dean of the Faculty of Medicine, University of the Witwatersrand; president of the Southern Transvaal Branch of the South African Medical Association; vice-president of the National Cancer Association of South Africa; and member and vice-president of the South African Medical Council.

Eighteen months before his death, Prof. Strachan was informed that he had multiple myeloma. Despite his continual pain, he performed his duties – academic and extra-academic – to the full, sparing neither his mind nor his body. His devoted students took turns to sit outside his hospital ward during the last days of his illness in case he needed attention. He died at the Johannesburg General Hospital in 1949, at the age of 59 years.

SOURCE

Barnetson J. Obituary. Archibald Sutherland Strachan. Born 23rd November 1891. Died 20th February 1949. *J Path Bact.* 1949; 61:465-466.

REFERENCES

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2. Silicosis. Records of the International Conference held at Johannesburg, 13-27 August 1930. Geneva: International Labour Office; 1930.