

Commentary: In memoriam of my father, Prof. Dr. med. Dietrich Eberhard Schairer

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My father, Professor Dr. med. Dietrich Eberhard Schairer, was born at Oberrot (Southern Germany) on 21 February 1907 as the first son of a medical practitioner. In 1925 he passed the Abitur at the Dillmann-Realgymnasium at Stuttgart. He then started to study medicine at the University of Tübingen, where he passed the 'Physikum' (basic sciences exam at the end of the first year) in 1927. He continued to study medicine at the universities of Berlin, Freiburg (where he completed his doctoral thesis¹) and Hamburg, where he passed the medical state exam in 1930. After medical training at the Universities of Cologne and later at the German Hospital in London he was houseman at the Protestant Hospital at Hattingen (North Rhine-Westphalia). Between 1932 and 1938 my father was tutorial assistant and later assistant at the Institute for Pathology of the University of Tübingen with Professor Dietrich. In 1935 he qualified as a university lecturer with his postdoctoral thesis 'Size determination of nuclei and determination of the number of chromosomes in human tumours'.^{2,3} Between 1938 and 1945 my father was a senior assistant and temporarily deputy director of the Institute for Pathology of the University of Jena under the directorship of Professor Gerlach. In 1943 he was appointed Professor. His work at the University of Jena was interrupted between 1939 and 1940 because he had to do military service and again in 1944 when he was sent to the eastern front as consultant pathologist. The last days of his stay at the crumbling east front are mentioned in Peter Bamm's book 'Die unsichtbare Flagge'.⁴ He was then a prisoner of war under the British. During this time he was employed as a pathologist in Denmark and Schleswig-Holstein. At the end of 1945 he was released from captivity. In 1946 he took over my grandfather's general practice in the village of Loßburg, in the Black Forest. In 1951 he set up his own practice as a pathologist and medical microbiologist in Ulm where he finally set up his own institute in 1962. At the end of 1977 he retired from his pathological practice. From 1985 my father suffered from progressive dementia. After the death of my mother he was cared for in the family home of his daughter Ursula Hirrlinger at Bad Waldsee (Southern Germany) where he died on 23 January 1996, a few weeks before his 89th birthday.

My father devoted his life to the medical sciences, particularly to pathology and general practice, and to chamber music. He was very widely read and extremely hard working. He always had good relationships with his students, patients and colleagues. It was quite rare for us (his eight children) to see our father on workdays—he was either at the institute or performing dissections. He was an excellent pianist who could sight-read music with no difficulty, and hence we often had guests



Figure 1 Prof. Dr. med. Dietrich Eberhard Schairer (1907–1996) who designed a case-control study to study smoking and lung cancer in the early 1940s

who came to make music with my father. When we lived in Jena his undergraduate students, doctoral students and some of his colleagues came every week to play chamber music.

My father's particular interests included carcinogenesis,⁵ iron⁶ and the metabolism of vitamin A,⁷ but his main interest was cancer research. The starting point of his studies on the association between smoking and lung cancer was the well-known observation that chimney sweeps were at particular risk of cancer of the scrotum, probably induced by soot or tar. He wondered if tar and its components would induce other cancers and hence started to treat the skin of experimental animals with tar from various sources. In these experiments he was able to produce squamous cell carcinoma. He suspected that the polycyclic aromatic compounds that are found in tar and in tobacco-derived condensates act as carcinogens. From these animal experiments and the observation that many of his patients who died from lung cancer were chain smokers he concluded in the 1930s that there must be an association between smoking and lung cancer. The next step was to initiate an epidemiological study with appropriate controls and this unequivocally demonstrated the association between smoking and lung cancer. But even in the mid-1960s, when I worked on my own doctoral thesis at the German Cancer Research Centre, the chief medical

statistician did not accept my father's conclusions. Perhaps because he was a chain smoker himself!

While working at Jena my father was asked to explore the possible cancer-inducing potency of saccharine, a synthetic sweetener. Though he did some work in this field he never published the results. I suppose that he could not demonstrate a correlation between saccharine consumption and bladder or liver cancer in experimental animals. The authorities would have used his saccharine data to justify a further reduction in the supply of sugar to the population. He therefore preferred not to publish these results.

In his recent book on the anti-smoking campaign during the Nazi regime, Robert Proctor⁸ suggests that my father and other scientists were working under the command of the Nazi administration. Other publications based on Proctor's work make the same assumption.⁹ I take issue with this interpretation. My father was a liberal person, as were many academics from Swabia. My father regarded the party manifesto of the Nationalsozialistische Deutsche Arbeiterpartei (National Socialist German Workers' Party) as inhuman and against freedom of speech and freedom of thought, the basis of intellectual creativity. He was convinced that the Nazi ghost story would find its end soon. My father never was a member of the resistance and he was not a hero, although he admired the would-be assassin Georg Elsner who tried to kill Hitler in the Hofbräukeller at Munich. Indeed, he was considered politically unreliable and found it difficult to get a job as lecturer at the University of Tübingen. He was not considered for the directorship of the Pathological Institute of the University of Jena when a successor for Professor Gerlach was sought. My father was sent to the eastern front in 1944 despite the fact that my mother was pregnant with her eighth child at the time. Men with large families usually did not have to do military service. Only a relatively small number of German soldiers returned from the Russian front, but luckily my father was among them.

When my father returned from British captivity he tried to get an appropriate position at a West German University Institute of pathology which would have allowed him to continue with his research, but he had returned too late. The senior posts

had already been reshuffled among those who were in West Germany at the end of the war. He would not accept offers of chairs outside West Germany because my mother preferred to stay in Germany. My father thus had no choice but to work as a general practitioner and later as a pathologist and microbiologist in his private institute. He often complained in later life that he was unable to continue his basic research because he could not get a university position.

As my father was an excellent cancer diagnostician, he was sent tissue specimens from colleagues all over the world, and his children got the stamps! The most valuable characteristics that distinguished my father were his ability to observe and to recognize patterns, both prerequisites for an excellent diagnostician and research scientist. He could also sight-read piano music, recognize most mountains of the Alps by their position and form, and name much of the European flora and fauna.

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