



## Letter to the Editor

### Obituary of Professor Dr. med. Heinz David (\*)

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## Abstract



This obituary of Professor Dr. med. Heinz David describes his work at the Institute of Pathology, Charité, Berlin, Germany, and his former and later life.

His former life is characterized by the doom of young children whose family had to escape the Red Army for more than one thousand kilometers at the age of a teenager. They had to wander in a completely destroyed Germany until they found a home and settled down in the small town Neuruppin of the former German Democratic Republic (GDR).

The scientific details of his career and as well as his fall from the mighty position in the GDR pathology society and his later life are described by a staff member and his interim follower (H. Guski) and by a 'Western' colleague and friend (K. Kayser) from both points of view, that of inside and that of outside the former communistic society. Therefore, this article is more than just an obituary. It demonstrates the impact of working conditions such as of equipment, social environment and communication on science, and specifically on surgical pathology.

**Keywords:** Heinz David, Obituary, Pathology, Career, German Democratic Republic, Unification of Germany.



## Curriculum vitae

On April 26, 2019, after a very short illness and therefore probably unexpectedly for everyone, Prof. Dr. med. Heinz David passed away in Berlin, the place of his tireless work and his greatest successes, but also disappointments.

Heinz Werner David was born on December 5, 1931 in Tilsit, the oldest of three siblings. His father was the chief physician in the internal medical department of the city hospital. Heinz attended elementary school and grammar school in Tilsit until 1944. Then they fled from the approaching front, which took the family to Hohenems in Vorarlberg via various stations (Frankfurt / O, Potsdam). Since the Reich Germans were no longer welcome there, after crossing the French and British occupation zones, the flight finally ended in November 1945 in the garrison town of Neuruppin. Heinz David graduated from high school here in the summer of 1950 as the only one in the class with an overall grade of "very good". With these prerequisites, he applied for a place in human medicine at both Berlin universities and, to his surprise, received admission to study medicine from both faculties. For understandable reasons he decided to go to Humboldt University.

With his studies at the Charité, Heinz David embarked on a path whose goal he pursued with diligence, a thirst for knowledge and ambition. In the 4th year of study he received the Goethe scholarship from the city of Berlin, which, in contrast to the state Karl Marx scholarship, was awarded exclusively for professional achievements. Heinz David heard lectures from many great names in medicine, such as Professors Stieve, Brugsch, Kraatz, Pschyrembel and Felix, Sauerbruch's successor, who shaped him as much as possible in the economically difficult and politically explosive period of those years dominated by Stalinism. The political indoctrination of medical students, who were urgently needed because numerous doctors, including many of his university lecturers and fellow students, left the GDR, however, was limited. The permanent personal bloodletting resulted in shortening the duration of medical studies was shortened by one year. That is why Heinz David passed the medical state examination in August 1955. Just one month later (after he had previously submitted his dissertation) he also passed the rigorosum examination, the compulsory doctoral examinations, both with the grade "very good". Then his steep and unique scientific career at the Charité began.

David's life as a scientist and university professor is inextricably linked with his doctoral supervisor, Prof. Louis-Heinz Kettler, who offered him an assistant position and held the prospect of a scientific activity in the field of electron microscopy. Dr. David seized the opportunity, quickly familiarized himself with the method and, after overcoming



technical difficulties, achieved the first research results which were published. These achievements prompted Prof. Kettler to entrust him with the management of the electron microscopy department as early as 1957. The young David did not disappoint his mentor and sponsor and already fulfilled the requirements for the habilitation in 1960. Shortly afterwards he was appointed lecturer and (according to the rules that were customary at the time, five years as a lecturer) in 1965 appointed professor with teaching assignment. After his habilitation there was an extraordinarily productive phase in which more than 100 publications were documented for the years 1961-67 alone, most of them with him as first author. In 1967 his monograph "Electron Microscopic Organ Pathology" was published, which made Prof. David one of Germany's leading scientists in the field of ultrastructural cell research. His never-ending drive to be scientifically active is probably due in part to the fact that, according to his own statements, he saw the opportunity, unique at that time, to "substantiate and continue" Virchow's cellular pathology on a subcellular level.

The fact that Prof. David became a member of the SED in 1968 should have nothing to do with his university career, since at that time he had already worked as a professor for several years and held important functions in the faculty as vice dean for study affairs and head of the admissions committee. The appointment as a "full" professor shortly afterwards (1969) does not change anything. Rather, from painful experience, he wanted not only to be the party's mouthpiece and vicarious agent, but also to influence decisions in university and health policy. It was only later, after many activities had failed, that it dawned on him that he could achieve nothing by doing this. Despite everything, he remained true to his conviction that the idea of socialism was correct.

The lifetime achievement of Prof. David is impressive and is incomparable. This includes not only around 450 scientific publications and 50 monographs and articles in text and handbooks as well as countless lectures at home and abroad, but also numerous managerial functions in which he was able to significantly steer and help shape the fate of the institute. Already under his mentor and academic teacher Prof. Kettler he was deputy director of the institute. After Kettler's death in 1976 he was again under the directorate of Prof. Simon for 10 years. In 1987 he was finally appointed to the Virchow Chair himself. 1971-1981 he headed the Institute for Scientific Information in Medicine (IWIM), which also produced numerous publications. Prof. David earned special merits as long-time dean of the medical faculty (1980-90), chairman of the Society for Pathology of the GDR (1980-90) and vice-president of the Society for Experimental Medicine (1978-89). He was a member of the Academy of Sciences of the GDR (since 1965, honorary member of the Hungarian Society for Pathology (since 1973), secretary



of the Council for Planning and Coordination of Medical Sciences, editor-in-chief of the journal for clinical medicine and member of the editorial board of several national and international journals. If one takes into account the additional activities in other scientific committees and social organizations, an achievement becomes visible which could only be achieved with the greatest diligence and iron discipline. Many colleagues, including successors in his functions at the faculty, thanked him for this.

Immediately after the general elections in March 1990, the majority of all employees of the institute (83%) expressed their confidence in him and after his release as dean in June 1990, the newly elected dean, Prof. Mau, paid tribute to his predecessor, "the longest-serving dean ever at the Charité" his respect and thanks. In the newly constituted "Structure and Personnel Commission" of the institute, which held consultations from January 1991, research projects and positions for their heads were proposed, with a C4 professorship planned for Prof. David. At the same time, a performance report was drawn up for the Science Council under his leadership. Despite all his services to the Charité, Prof. David was ultimately asked by the dean at the end of August 1991 to choose between dismissal without notice and early retirement.

What happened? The accusation was the previous activity for the State Security Service of the GDR. This would have required a signed declaration of commitment, which was never found in the file on Prof. David. Despite unjust and humiliating treatment, also by colleagues, Prof. David did not despair and continued to pursue quite ambitious plans. He has made lasting merits with the monographs "Rudolf Virchow and Medicine of the 20th Century" (published 1992), "Big Science and the Myth of the Honesty and Honesty of Scientists" (published 2000), but above all with the two-volume book "... the house should be called the Charité" (published 2004). With this medical-historical work, the author has set a monument for the Charité, but also for himself. Only those who have not broken off contact with him know that Prof. David was professionally active in pathology as Locum Tenes doctor in numerous private branches until he was 85 (he called himself a traveling pathologist). He also described this time with his own subtle humor.

Prof. David was not only an excellent scientist, but also an extraordinary person with all the virtues and weaknesses that characterize such a person. His achievements are undisputed, his decisions can only be understood by those who have through the time personal experience and knowledge of the condition in which they were made.

Anyone who knew him personally admired his sense of duty and conscientiousness and appreciated his honesty and helpfulness. Like everyone else, he was not infallible and



was also aware of it. A good and sensitive core was hidden behind a somewhat distant exterior. Reading was his greatest pleasure from his youth, writing was his declared passion, science his world. He has dedicated his entire life to this and therefore it is all too understandable that other interests, including family interests, had to take a back seat. He himself made his peace with his extremely detailed and factual autobiography. For those who have lived, worked, argued, suffered, believed and hoped with him, he will not be forgotten.

#### Informal meetings and personal 'Western oriented' impression

My first scientific and general discussions with Prof David took place when he was still in power and a well - known and accepted pathologist in the GDR as well as in the Federal Republic of Germany (FGR). He gave the impression that 'he lives for natural sciences of surgical pathology'. At that time, immunohistochemistry was not known, and electron microscopy seemed to be a promising tool to detect and measure light microscopically invisible sub-cellular structures and compartments. That was his expertise and he explained:

'I compare the detected microsomes in liver cells with my lawn gnomes. Microsomes are involved in multiple actions that might enhance the production and release of enzymes, and protect the liver cells against external damage such as alcohol.'

'I agree for the idea of microsome functions; however, what about the lawn dwarfs. They are according to my knowledge just porcelain figures, and do not seem to perform any actions.'

'Young colleague, you are wrong. They do possess functions in my yard: For example, they hinder the weed to grow because they occupy the weed's growing places. Therefore, even dead structures might have functions that might alter their environment. We should think about it. Come on, I want to show you their positions and that of the weed.'

'Oh, I see,' and we started to walk around in his small garden. His garden was completely cultivated and in an excellent shape. He grew tomatoes, cucumber and paprika in an edge, flowers bloomed all over.

'Your yard is in an excellent shape. My own is a wilderness when compared to yours.'



‘That is because of our socialistic government. Our government tells us, we should not care on our own property, because everything belongs to all citizens and, thus, all of them will take care of it.’

He shook his head: ‘My own experience is, that nobody and everybody, as well as nothing and everything experience the same result of actions, in science as well as in social behavior: Everybody tries to act on everything, which is chaos. By definition, chaos results in nothing. So, it is much wiser to do nothing, because the result is the same.’

He shook his head, and said quietly: ‘It took not much time until our government and our people recognized the situation, and are doing...’

‘Nothing’ I completed his sentence.

Later, years after his fall, I visited him in his house again. None of his lawn dwarfs has survived.

He explained: ‘They have served for my watchmen at the time when I was endangered by spies, the secret service, and by the envy of colleagues too.’

Now, I had to skip my research, I have lost my interest on microsomes. I cannot take care of my lawn dwarfs too because I have to travel to pathology institutions far away. There I have to earn money because of my small pension. I had to kill and destroy all of them.’

‘So it is a new life style for you?’

‘Yes, indeed, it is a new life style. I fall from the high castle window of my position deep into the ditch. Herein, only a few colleagues can stand the bad smell of a dirty person. I killed my guardians and left most of my so-called friends. In reverse, I won my new liberty and a new friend, my Whisky.’

Indeed, he liked Whiskey any time when he passed by my house on his way to earn the urgently needed money in private pathology institutions.

To avoid misunderstanding: I have never seen him drunken, not at any time. I am sure that his brain protected his heart.

In conclusion, we lost a good friend and convinced scientist who made his way in a communistic environment and was pushed out by democratic order.



(\*) Parts of this article are translated from the obituary which has been published in the German magazine "Der Pathologe" (2019) 40 (Suppl 3): S405 –S406); [Sonderheft 3/2019, H.Guski, R. Meyer: Heinz David, (5.12.1931 – 26.4.2019)]..

#### Selection of Heinz David's publication list

##### a) Books:

1. David, Heinz: Elektronenmikroskopische Organpathologie. VEB Verlag Volk und Gesundheit, Berlin, 1967, S 1 – S711.
2. David, Heinz: Ortho- and Pathomorphology of Human and Animal Cells in Drawings, Diagrams and Constructions, Gustav Fischer Verlag, Stuttgart, New York, 1978, S 1 – S503.
3. David, Heinz: Rudolf Virchow und die Medizin des 20. Jahrhunderts. Quintessenz Verlag GmbH. Berlin, 1993, S1 – S366.
4. David, Heinz: „...es soll das Haus die Charité heißen.“ Akademos Wissenschaftsverlag, Hamburg, 2004, S1 – S1235.

##### b) Articles:

1. [David H. \[The concept of "organellopathies"--component of modern cellular pathology\]. Zentralbl Allg Pathol. 1990;136\(1-2\):15-32.](#)
2. [David H. Morphometrical findings from human and animal liver cells in physiological and pathological conditions. Pathol Res Pract. 1987;182\(3\):407-15.](#)
3. [David H, Reinke P. The concept of the "perisinusoidal functional unit" of the liver--importance to pathological processes. Exp Pathol. 1987;32\(4\):193-224.](#)
4. [David H, Uerlings I, Reinke P. The perisinusoidal functional unit in amyloidosis. Exp Pathol. 1987;32\(3\):153-62.](#)



5. [David H. \[The submicroscopic structure of DMAB-induced liver cholangiocell carcinoma in rats\]. Z Krebsforsch. 1962;65:130-8.](#)
6. [David H. \[On new formation of mitochondria in the liver cells of the fire salamander \(Salamandra maculata\)\]. Z Zellforsch Mikrosk Anat. 1962;57:567-71.](#)
7. [David H. \[the Cell as a Cybernetic System\]. Dtsch Gesundheitsw. 1965;20:101-7 CONCL.](#)
8. [David H. \[Submicroscopic Structural Differences in the Liver of Various Animals\]. Rev Int Hepatol. 1965;15:427-36.](#)
9. [David H. \[Ultrastructural cell changes of the tubular epithelium of the kidney after ligation of the kidney veins\]. Verh Dtsch Ges Pathol. 1965;49:141-6.](#)
10. [David H. \[Alterations of the volume and surface of liver cells of male rats during postnatal development\]. Acta Biol Med Ger. 1979;38\(7\):935-52.](#)
11. [David H. Quantitative and qualitative changes in the mitochondria in hepatocytes during postnatal development of male rats. Exp Pathol \(Jena\). 1979;17\(7-8\):359-73.](#)
12. [David H. \[The importance of cellular ultrastructure research for medicine--a review \(author's transl\)\]. Zentralbl Allg Pathol. 1979;123\(5\):452-78.](#)
13. [David H. Some recent results of the quantitative characterization of heart muscle cells. Z Mikrosk Anat Forsch. 1979;93\(1\):113-37.](#)
14. [David H. \[Changes of cell organelles in the developmental and aging process of heart and liver\]. Gegenbaurs Morphol Jahrb. 1981;127\(4\):564-73.](#)
15. [David H. \[Cellular sites of action and effects of drugs. A review \(author's transl\)\]. Zentralbl Allg Pathol. 1981;125\(2\):95-121 .](#)
16. [David H. Rudolf Virchow and modern aspects of tumor pathology. Pathol Res Pract. 1988;183\(3\):356-64.](#)
17. [David H. \[Trends in pathology on the threshold of the 20th into the 21st century\]. Pathologe. 1988;9\(2\):65-9.](#)
18. [Guski H, Wassilev G, Meyer R, David H. Morphometric analysis of myocardial mitochondria in rats during adaptation to exercise. Cor Vasa. 1980;22\(5\):375-83.](#)



