

A TRIBUTE TO PROFESSOR WOLFGANG TRAUGOTT ULMER

Janusz Kowalski

Professor Emeritus of the National Institute of Tuberculosis and Lung Diseases, Warsaw, Poland

Prof. dr. med. Wolfgang Traugott Ulmer was born on September 7, 1924 in Dinkelsbuehl, a small town in Frankonia, a region on the northern borderline of Bavaria. In 1943, he finished up his secondary education in a humanistic lyceum. Shortly after receiving the baccalaureate certificate, he was drafted into the Wehrmacht Army and sent to the East Front during the World War II. Wounded with a shot into the chest, he was moved back from the Front and subjected to several-month therapy, and then relieved to civil authorities.

After the War, Prof. Ulmer did medical educational courses at the Faculty of Medicine of Heidelberg University during 1946-1952. After completing the studies, he began his clinical carrier as an assistant in a clinic of internal medicine directed by Prof. Karla Matthes, who directs the young doctor's interests toward the pathologies of the respiratory system, and, in particular, commissions Prof. Ulmer to set up a pulmonary lab for testing lung function in the academic environment of Heidelberg. The young doctor gets short-term trainings in foreign medical centers, in Groningen in the Netherlands, with Prof. N.G.M. Orie, in Zurich in Switzerland, with Prof. P.H. Rossier, and later in the US as well.

Prof. Ulmer's scientific, teaching, and practical medical work develops at a fast pace. His early achievements consist of the elaboration of a method to analyze oxygen and carbon dioxide in the exhaled air, with fast responding analyzers [1-3]; the latter being later termed capnograph. In the area of respiratory mechanics, he became instrumental in popularization whole body plethysmography in Germany to study airway resistance in the bronchial tree and gas thoracic capacity after a quiet exhalation [4, 5], with the use of a Bodytest apparatus. The methodology turned out

later, and still is to-date, essential for the studies of bronchodilation and reversibility of bronchospasm of various etiology. Another early achievement of Prof. Ulmer had been the initiation of clinically-oriented studies of lung compliance; which is the ability of the lungs to stretch during volume changes relative to applied changes in pressure. That triggered a flurry of functional studies, now being tenets in the respiratory pathophysiology, demonstrating, among other things, increased lung compliance in obstructive and decreased in restrictive pathologies [6-11].

In the early 1970s, Prof. Ulmer becomes head of a clinic of respiratory diseases in Bochum; the region of Germany heavily involved with coal mining industry. The new position motivates Prof. Ulmer to broaden his clinical and research interests which now evolve toward occupational lung diseases [12, 13]. He is one of the first to point out that respiratory disability in silicosis is underlain not so much by fibrotic changes seen in radiograms as

by increased airway resistance and lung emphysema [14]. His another outstanding achievement has been the introduction of anticholinergics [15, 16], such as ipratropium bromide, and β_2 -agonists, such as fenoterol, and also the combination thereof - Berodual, in a metered dose inhalers, into the palette of bronchodilating medicines; these therapies provide an improvement in lung function and health status, and by doing so substantially extend the life span of coal miners.

At about the same time, Prof. Ulmer undertook close and sustained for the following years collaborations with the Polish respiratory counterparts such as the Clinic of Respiratory Diseases of Medical University in Warsaw, with the Department of Respiratory Physiopathology of the National Institute of Tuberculosis and Lung Diseases in Warsaw, and with the Clinic



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of Internal Diseases of the Medical University in Lublin.

During the time of Marshal Law in Poland, 1981-1983, a number of young Polish doctors from the cities of Warsaw and Lublin undertook clinical training courses in Prof. Ulmer's clinic of respiratory diseases in Bochum. Another significant form of bilateral collaboration consisted of Polish-German meetings organized alternately in Germany and Poland. Prof. Ulmer also initiated collaborative studies with a clinic of internal medicine in Lublin, headed at the time by Prof. J. Hanzlik, regarding the analysis of pulmonary function in miners of a newly constructed coal mine in Bogdanka [17, 18]. The findings of that study confirmed earlier findings [13] that not so much silica dust as cigarette smoking was the main underlying reason of disorders of pulmonary mechanics in miners.

Prof. Ulmer often stressed his ties to Poland and a desire to having his part in the development of modern pulmonary medicine in Poland. His attitude undoubtedly stemmed from, and was strengthened by, the Polish roots of his Mother, who was born in the city of Lodz, and by the Christian virtues of his Father, Prof. Friderick Ulmer, an evangelic theologian, who was banned to teach students at the Heidelberg University and to have sermons to worshippers during religious services during the World War II, due to his critical, publically expressed, remarks on the Nazis. Prof. Ulmer passed away in Bochum on September 17, 2009 at the age of 85.

Prof. Ulmer was arguably for decades the most eminent European respiratory scientist and clinician in the second half of the 20th century. He published over 450 articles, noted in international indexes, and edited many books. His active publishing spanned the years 1955-2004, when he wrote his last updates on the lung pathophysiology [19, 20]. His scientific insights into the field of respiration have led to many advances which are greatly appreciated to-date. He also was an empathic person to younger clinical fellows, which gained him many, many friends.

As a token of appreciation of Prof. Ulmer's contributions to the development of Polish pulmonology, he received honorary membership of the Polish Respiratory Society and earned a Doctor Honoris Causa degree rendered by the University of Lublin in Poland for his outstanding contributions to medicine.

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