

# Memories of a great personality of Romanian pharmacology – Professor Barbu Cuparencu (1928-2014)

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**Abstract.** Professor Barbu Cuparencu, PhD, Docent, was a well-known personality of Romanian pharmacology from the second half of the 20th century, with a professional standing also acknowledged abroad. His prolific activity in pharmacology is well known. However, the beginnings of his career, when he was member of the Department of Physiology at the Faculty of Medicine of Cluj, remains less known. Few testimonies were also left about his human nature, cultural and linguistic preoccupations, and this is due to his private character. This article is meant as a homage to Professor Cuparencu’s memory and an attempt to complete the image many generations of students kept about him.

**Key Words:** Barbu Cuparencu, pharmacology, history of medicine.

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## Introduction

Professor Barbu Cuparencu (1928-2014) was a well known personality of Romanian pharmacology of the second half of the 20th century. His research and published books won him national and international recognition.

This article is not focused on this aspect of his career, but rather on memories about Professor Cuparencu as a teacher, scientist and colleague.

For those who did not know him directly, we shall present several important aspects of his life and career.

## Succinct biographical data

It is interesting that some data of Barbu Cuparencu’s biography are little known to this day, after his death. During his life, discretion prevented certain aspects to be revealed to the public. After his passage to eternity, significant data may be found to complete his portrait as a professor and a scholar.

In the dictionary “20th Century citizens of Cluj”, published in 2000, Cuparencu is mentioned with scarce data. More information appeared in the illustrated dictionary “Cluj Personalities (1800-2007)”, edited by Dan Fornade and published in 2007. However, we did not identify sufficient biographical data that highlight his complex formation as a doctor, and also as a man of culture. Therefore, we resorted to the Curriculum vitae that Cuparencu himself wrote when he was professor at the Faculty of Medicine and Pharmacy of Oradea (Cuparencu 2003).

He was born on 2 November 1928 in Cluj, in an intellectual family. Some information about his family was provided by Professor Elena Curea. We find that Cuparencu’s mother – Livia Cuparencu – was a school teacher. During World War II, while the family was in refuge in Alba Iulia, she was head of the Lyceum for Girls in that town. She had “real teaching and managerial abilities, which later on gained her a position as academic staff of the Victor Babeş University of Cluj” (Curea 2016). Professor Elena Curea emphasizes that “the young Barbu Cuparencu grew up in this fine intellectual family, which gave him solid general knowledge, on which he built his professional career” (Curea 2016).

Primary and mid school were attended by Cuparencu in his home town until 1940, then in Alba Iulia.

After finishing school in 1946, he enrolled in the Faculty of Medicine, within “King Ferdinand I” University of Cluj. In 1948 the Faculty separated from the main university and became the core for the Institute of Medicine and Pharmacy of Cluj. As a student Cuparencu had outstanding professors, representatives of the second generation of Cluj Medical School: Grigore Benetato (1905-1972) – Physiology, Cornel Crişan (1895-1958) – Histology, Rubin Popa (1901-1958) – Pathology, Ioan Goia (1892-1982) – Semeiology, Leon Daniello (1898-1970) – Phthisiology, Ioan Gavrilă (1898-1976) – Infectious Diseases, Valeriu Bologa (1892-1971) – History of Medicine etc. Cuparencu graduated in 1952 with honors diploma.

His career started early, when he was a student. Thus, in 1949 he was apprentice assistant of Physiology, head of department being Prof. Benetato.

Between 1952-1955 Cuparencu was a doctoral student and assistant lecturer in the same Department (Cuparencu 1969). He became a PhD in 1957, his scientific supervisor being Benetato. The fact that his doctoral studies were in physiology proves his great interest in this field. From 1955 till 1961 he was lecturer (Marin 2002).

The Department of Physiology underwent changes in 1958, when Professor Benetato was transferred to the Faculty of Medicine of Bucharest. In these circumstances head of the Physiology Department of the Faculty of Medicine in Cluj became Assoc. Prof. Ioan Baci (1921-2004), who transferred here from the department of Pathophysiology. In 1961, after 12 years of activity as physiologist, Cuparencu transferred to the Department of Pharmacology of the Cluj Institute of Medicine and Pharmacy. At that time, Prof. Constantin C. Velluda (1893-1978) was the head of the department.

In pharmacology, Barbu Cuparencu brought his experience as physiologist, which marked his future career in the field of clinical pharmacology.

The year 1964 was important for Cuparencu: he was nominated head of the department, after Velluda retired.

At the age of only 40, in 1968, Cuparencu was promoted full professor. In 1970 he became Docent (Cuparencu 2003).

He remained the leader of the Department of Pharmacology until 1994, when he had to retire. This was not the end of his didactic and scientific career. Starting with this time, he became professor and head of the Department of Pharmacology of the Faculty of Medicine and Pharmacy in Oradea. He remained in this position until 2003.

Barbu Cuparencu supervised more than 50 PhD theses, starting with 1969 and till the last years of his life (Șandor 2014). Among his doctoral students, the majority were physicians and eight were pharmacists (Grecu et al. 2014).

He was chief editor of the ample treatise *Pharmacology for Physicians* in 4 volumes (1976-1996). In collaboration with Simion Pop (1923-2009), Tereza Bârsu, Mihai Kory (1934-1994) and Liviu Safta, Cuparencu elaborated the monograph *Pharmacological Receptors* (1977).

Cuparencu was first author of the book *Clinical Psychiatry. An Alphabetical Guide*, published in 1978 under the editorship of Aurelia Sârbu. Coauthors were: Traian Hotico, Rodica Macrea, Stelian Rândașu, Liviu Safta, Aurelia Sârbu and Alexandru Secăreanu.

Another book written by Cuparencu was *Guidelines in Pharmacology and Drug Interactions* (1984). Co-authors were: Liviu Safta, Gheorghe Suci and Alexandru Varga. The monograph entitled *The Pharmacology of Atherosclerosis* was authored by: Nicolae Hâncu, Barbu Cuparencu and Alexandru Duțu (1988). To be also mentioned is the important monograph *The Effects of Cardiovascular Drugs Mediated by the Central Nervous System* (1988).

The book *Drugs of the General Practitioner*, coauthor Ladislau Szegedi (1995) was later re-edited, coauthors being L. Szegedi and Ioan Magyar (1998).

Other books written by Cuparencu: *Updates in Pharmacology and Pathophysiology*, coauthor Luminița Pleșca (1995), *Clinical*

*Pharmacology for Anesthetists* (1998), *Marketing for the Drug Industry*, coauthors Septimiu Tudor Bucurescu and Victor Ponoran (1999), *Benzodiazepines – chemistry, biochemistry, pharmacology, therapeutic applications*, in collaboration with cu Jozsef Horák and Liviu Safta (2001) and *Medicines of the family medicine practitioner*, coauthor Dafin Fior Mureșanu (2007). Cuparencu also published two books in English: *The Pharmacologic Receptors*, coauthor Michaela Timar (1998) and *Textbook of Fundamental and Clinical Pharmacology*, in 2 volumes (2003), coauthors: Mihaela Țiglea, Carmen Pantiș, Liviu Stoica, Ioan Magyar and Marius Chipurici.

Cuparencu's last book was *Textbook of Fundamental and Therapeutic Pharmacology*, coauthor Ioan Magyar (2015).

The scientific activity of Prof. Cuparencu was reflected by 300 journal articles, published in Romania and abroad.

For students, he edited *The textbook of pharmacology for 3rd year undergraduates of general medicine, pediatrics and dentistry*, which was published in successive editions (1969, 1971-72, 1978 etc.) and *Practical works of pharmacology*. These teaching books were elaborated together with the staff of the Department of Pharmacology from the Institute of Medicine and Pharmacy in Cluj.

Along the decades Cuparencu was member of editorial boards of well known Romanian journals: *Clujul Medical*, *Fiziologia Normală și Patologică* [Normal and Pathological Physiology], *Physiology (Timișoara)*, *Studii și Cercetări de Fiziologie* [Studies and Research of Physiology], *Romanian Journal of Physiology*, *Archives de l'Union Medicale Balkanique*, *Revista Medicală Orădeană* [Medical Journal of Oradea] etc.

He was member of the Academy of Medical Sciences from Romania and of prestigious scientific societies from abroad: *New York Academy of Sciences*, *Accademia della scienze mediche e chirurgiche din Napoli*, *Societa italiana di farmacologia*, *Société française de pharmacologie*, *Société française de physiologie*, *Sociedad cubana de ciencias fisiologicas*, *Balkan Medical Union* etc.

Among the awards and prizes of Cuparencu, we mention *Ordinul Muncii* [Order of Labor] – class III (Bârsu 2010).

Professor Barbu Cuparencu died on 25 June 2014, at the age of 86 years.

## Overview of the generation to which Barbu Cuparencu belongs

Cuparencu belonged to a generation of renowned university professors, his colleagues being members of the academic staff of the Cluj School of Medicine. Among them we mention: Aurel Chișu (1925-1984) – *Pediatric Clinic I*, Iosif Suci (1925-1984) – *Occupational Medicine*, Mihai Manasia (1927-1995) – *Nephrology*, Roman Vlaicu (1927-2010) – *Medical Clinic I*, Nerva Paina (1927-1988) – *Epidemiology*, Radu Georgia (1929-2008) – *Anatomy*, Liviu Gozariu (1930-2012) – *Endocrinology* and many others.

It is interesting that B. Cuparencu was born in the same year – 1928 – with other professors from the Cluj Medical School: Mircea Cucuianu – *Clinical Biochemistry*, Sandu Bologa – *Oncological Surgery* and director of the *Oncology Institute* from Cluj, Jianu Butnariu – *Pediatric Clinic III*, Ioan Quai (d. 1987) – *Forensic Medicine*, Cornel Toader – *Surgical Clinic III* etc.

At the Department of Physiology, where Cuparencu began his career, he was colleague with: Mircea Dorofteiu (1930-2013), Liviu Grosu (1928- ?), Ioan Romul Șovrea (1927-2006) etc.

Subsequently, at the Department of Pharmacology Cuparencu was colleague with: Ioan Țițaș (n. 1923), Vilhelm Csuták (n. 1926), Liviu Safta (n. 1929), Tereza Bârsu, Viorica Aruștei, Șandor Vlaicu (n. 1946), Jozsef Horák, Anca Dana Buzoianu, Dana Goșa etc.

The list of Cuparencu's colleagues is not complete, the space of this article allowing for only the most important. We listed them to show that Cuparencu was a true asset of the Cluj Medical School. Another reason for mentioning all these personalities is that most of them have already gained a place in the history of Romanian medicine.

## Barbu Cuparencu in the memoirs of his contemporaries

Cuparencu's teaching and research work was synthesized by Emeritus Professor Ostin C. Mungiu (from the "Grigore T. Popa" University of Medicine and Pharmacy of Iasi), who wrote: "Prof. Barbu Cuparencu promoted a pharmacology based on physiological and pathophysiological mechanisms, which made easier the students' understanding of drug actions, both beneficial and deleterious. On a national level, he was noted especially for the well known series of 4 volumes of Pharmacology for Physicians (in collaboration with Liviu Safta and Vlaicu Șandor), which, alongside with Valentin Stroescu's books of pharmacology, became the students' and doctors' essential "bedside" resources for many decades. Cuparencu's research work in the field of arrhythmias of central origin generated publications acknowledged internationally, and so did research in the field of benzodiazepines" (Mungiu 2016).

Prof. Cuparencu's generation fellow, Emeritus Professor Gheorghe Suci (from the "Iuliu Hațieganu University of Medicine and Pharmacy), admired Cuparencu for his dedication, discipline and perseverance that pervaded his work, his interest for the novelties and their correct assessment (Suci 2017).

Cuparencu's disciple and successor in the Department of Pharmacology from the "Iuliu Hațieganu" University of Medicine and Pharmacy, Prof. Vlaicu Șandor, emphasized the fact that his mentor "had a remarkable contribution to the development of Pharmacology at a national level, establishing at the same time fruitful collaborations with prestigious centers in Italy, France, Great Britain, Hungary and other countries" (Șandor 2001).

Associate Professor Daniela Bedeleanu ("Iuliu Hațieganu" University of Medicine and Pharmacy) – a former student of Prof. Cuparencu – mentioned that everything taught by him "became clear, unfolded intelligently, every substance and drug was defined by its place and mechanism of action. Stark substance and drug names became alive and with practical implications due to pertinent and logical explanations. A special mention for the neurotransmitters, explained by their ways of influence through pharmacological substances and drugs. It is then that I learned how sedatives, narcotics, anesthetics and psychotropic drugs worked" (Bedeleanu 2016).

Another former student of Cuparencu - Prof. Victor Cristea ("Iuliu Hațieganu" University of Medicine and Pharmacy) – wrote some memories about the lectures of Cuparencu. The

first lecture was "a fluid and temperamental presentation, with brackets and references to other fields, considered known, understood and therefore familiar". After a few months, these courses "were beginning to <bind>, settle, while the practical works, well thought and prepared, were elucidating many theoretical ideas. Toward the end of the year, when we started prescription skills, we could be well aware of the meaning and importance of dosages; the course became really attractive, we, who were studying semeiology, stethoscope always at hand, were becoming more confident; until then we had seen and touched patients, examined them and made a diagnosis, but henceforth we were able to treat them" (Cristea 2016).

Cuparencu's human nature was delineated by two of his former students – Prof. Marilena Oargă and Prof. Sorin Nicu Blaga (both of them from the "Iuliu Hațieganu" University of Medicine and Pharmacy). Prof. Marilena Oargă wrote: "the professor and the scientist were complemented by Cuparencu's human nature, a lover of life, with a great sense of humor, fine erudite, speaker of several languages, supporter of students, who deserves his place in the hall of fame of our University" (Oargă 2016). Prof. Sorin Nicu Blaga considered that Cuparencu was "a professor of high academic standing, with a good common sense and even benevolence" (Blaga 2013)

One significant memory was written by his disciple and successor as head of the Department of Pharmacology of the Faculty of Medicine and Pharmacy in Oradea, Prof. Ioan Magyar. He mentioned that "when Prof. Cuparencu reached the age of 75 years he received a sum of money from a relative abroad. His generosity was outstanding, the money was used to buy a computer, printer, scanner for the Department of Pharmacology" (Magyar 2016).

Before concluding this paper dedicated to the memory of Professor Cuparencu, it should be mentioned that he was knowledgeable in seven languages at an advanced level (as he wrote in his CV): English, French, German, Hungarian, Spanish, Italian and Russian. His multilingualism, as well as his vast knowledge of history and geography determined Prof. Valeriu Bologna to commission Cuparencu to write a chapter of the history of pharmacology. It was included in the ample tome of the History of Universal Medicine (care of Valeriu Bologna), published in 1970.

## Conclusion

Through his achievements, Barbu Cuparencu was an appreciated personality of pharmacology in Romania, his prestige being well known abroad.

The memories mentioned in our article complete the image many generations of students kept about Prof. Dr. Barbu Cuparencu.

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