# **MEMORIAL ARTICLE**

# Professor Krystyna Zawilska (1937–2019): the grande dame of Polish hematology

## Jacek Musiał

2nd Department of Internal Medicine, Jagiellonian University Medical College, Kraków, Poland

Professor Krystyna Zawilska passed away on August 23, 2019. She was a distinguished internist and hematologist, and a leading expert on thrombosis and hemostasis in Poland. In the last 12 years, she greatly influenced the field of hemostatic disorders in our country as a coinitiator and president of the Working Group on Hemostasis of the Polish Society of Hematology and Transfusion Medicine. Throughout her long and prominent career she was bound to her beloved Poznań.

Professor Zawilska graduated in 1960 from the Faculty of Medicine at the Poznan University of Medical Sciences. She defended her doctoral thesis in medicine in 1967. She was awarded a position of associate professor in 1977 and a professorship in 1989. Professor Zawilska specialized in internal medicine, hematology, and angiology. Almost all her professional and scientific career was connected with the Poznan University of Medical Sciences, where she worked initially at the Department of Internal Medicine and later at the Department of Hematology. In years 2007 to 2013, she headed the Department of Internal Medicine and Hematology at J. Struś Hospital in Poznań. From 1994 untill her last days, she also held a position of the director of the Diagnostic and Therapeutic Center INTERLAB in Poznań.

From the very beginning, her scientific interests focused on the hemostatic system and its disorders. In 1971, she received the Claude Bernard scholarship and spent a year at the Institut de Recherches sur les Maladies du Sang in Paris. She returned to Paris in years 1973 to 1974 and 1982 to 1983. The British Heart Foundation scholarship allowed Professor Zawilska to spend another year at King's College London. Her major research interests were focused on blood platelet function, venous thromboembolism, arterial thrombosis, inherited and acquired thrombophilia, and congenital bleeding disorders. Krystyna Zawilska authored and coauthored more than 270 scientific papers and 48 textbook chapters. Only in the last several years, she described a new mutation



FIGURE 1 Professor Zawilska on World Thrombosis Day, October 13, 2018, at a conference entitled "Venous thromboembolism: an underestimated problem" in Warsaw, Poland



FIGURE 2 Professor Zawilska in April 2019 at the 18th National Conference of the Polish Society of Internal Medicine in Warsaw, Poland (photo courtesy of Stanisław Kowalczuk)

in the fibrinogen gene (fibrinogen Poznań) leading to a mild bleeding tendency¹ and was a coauthor of the descriptive characteristics of Polish patients with inherited deficiencies of plasma coagulation inhibitors.²

Correspondence to: Prof. Jacek Musiał, MD, PhD, 2nd Department of Internal Medicine, Jagiellonian University Medical College, ul. Skawińska 8, 31-066 Kraków, Poland. phone: +48124305314, email: jacek.musial@uj.edu.pl Received: September 19, 2019. Accepted: September 19, 2019 Published online: September 30, 2019. Pol Arch Intern Med. 2019; 129 (9): 651-652 doi:10.20452/pamw.15000 Copyright by Medycyna Praktyczna,

FIGURE 3 Professor Zawilska in June 2019



Her area of activity, however, mainly as president of the Working Group on Hemostasis of the Polish Society of Hematology and Transfusion Medicine, was much broader. Her refined manners, vast knowledge, and organizational skills allowed her to successfully fight to improve health services and treatment availability for patients with congenital bleeding disorders, mainly hemophilia. Recently, Professor Zawilska, among others, served as a member of the Advisory Board of the Ministry of Health for the National Program for Treatment of Patients with Hemophilia and Related Bleeding Disorders for years 2019 to 2023. She also helped to create national registries for patients with inherited bleeding disorders.3 Professor Zawilska was also actively engaged in organizing important periodic educational conferences, such as Advances in Hemostasis (12 conferences) and the Polish edition of a conference initiated by the International Society on Thrombosis and Haemostasis, World Thrombosis Day.4 These conferences are held every year on October 13 - the birthday of Rudolf Virchow.

As an internist, professor Zawilska was concerned with familiarizing Polish physicians with important international standards and guidelines for diagnosis and treatment of hemostatic disorders, mainly venous thromboembolism. Her last initiative was the creation of an educational electronic portal (hemostaza.edu.pl) aimed both at physicians and patients with hemostatic disorders. Her educational and social activities in these fields deserve the highest recognition.

Professor Zawilska was a member of many Polish and international scientific societies: International Society on Thrombosis and Haemostasis, American Society of Hematology, European Hematology Association, World Federation of Hemophilia, Polish Society of Internal Medicine, and Polish Society of Hematology and Transfusion Medicine. She also became a honorary member of the latter. She was a Polish representative at the European Thrombosis and Haemostasis Alliance. Professor Zawilska served as a member of

the Scientific Board of the *Polish Archives of Internal Medicine* (*Pol Arch Intern Med*) (for 12 years starting from 2007) as well as the *Acta Haematologica Polonica* (*Acta Haematol Pol*).

She was buried at Cmentarz Junikowski in Poznań on September 7, 2019.

### **ARTICLE INFORMATION**

**OPEN ACCESS** This is an Open Access article distributed under the terms of the Creative Commons Attribution -NonCommercial- ShareAlike 4.0 International License (CC BY-NC-SA 4.0), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material, provided the original work is properly cited, distributed under the same license, and used for noncommercial purposes only. For commercial use, please contact the journal office at pamw@mp.pl.

HOW TO CITE Musial J. Professor Krystyna Zawilska (1937–2019): the grande dame of Polish hematology. Pol Arch Intern Med. 2019; 129: 651-652. doi:10.20452/pamw.15000

### **REFERENCES**

- 1 Zawilska K, Undas A, Fish RJ, et al. Characterization of novel nonsense mutation in FGG (Fibrinogen Poznan) causing hypofibrinogenemia with a mild bleeding tendency. Thromb Haemost. 2010; 103: 677-679.
- 2 Wypasek E, Corral J, Alhenc-Gelas M, et al. Genetic characterization of antithrombin, protein C, and protein S deficiences in Polish patients. Pol Arch Intern Med. 2017; 127: 512-523.
- 3 Zdziarska J, Chojnowski K, Klukowska A, et al. Registry of inherited bleeding disorders in Poland current status and potential role of the HemoRec database. Haemophilia. 2011; 17: e189-e195.
- 4 Zawilska K, Windyga J. World Thrombosis Day 2018 in Poland. Pol Arch Intern Med. 2019; 129: 69-715.
- 5 Zawilska K, Bała MM, Błędowski P, et al. [Polish guidelines for the prevention and treatment of venous thromboembolism. 2012 update]. Pol Arch Med Wewn. 2012; 122 (suppl.2): 3-74.