Institute of Experimental Morphology, Pathology and Anthropology with Museum Bulgarian Anatomical Society

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Professor Anna Georgieva Boyadjieva-Michailova (08.05.1925 – 13.10.1997)

It has been one hundred years since the birth of our outstanding Bulgarian scientis, the morphologists and cell anatomists Prof. Anna Georgieva Boyadjieva-Michailova. Let us remember her life and personality as a leader, her scientific career and contributions.

Anna Boyadjieva-Michailova was born on May 8, 1925 in the town of Veliko Tarnovo in the family of the famous gynecologist Prof. Georgi Boyadjiev.

Anna Boyadjieva graduated in medicine in 1950 at Higher Medical Institute in Sofia (now Medical University-Sofia). Since 1955 till 1957 she joined Bulgarian military medical brigade in Korea as a head of bacteriological laboratory. Soon after, Anna Boyadjieva successfully completed specialization in microbiology at the Institute for Specialization of Medical Doctors in Sofia (1958). Her scientific inspiration in electron microscopy is marked by two specializations – in the Charles University in Prague and in the Institute of Biology and Medicine at the German Academy of Sciences in Berlin (1960). Upon her return in Bulgaria, Anna Boyadjieva introduced electron microscopy in the Institute of Morphology (now Institute of Experimental Morphology, Pathology and Anthropology with Museum) at the Bulgarian Academy of Sciences in Sofia. Under the supervision of Acad. Asen I. Hadjiolov, Anna Boyadjieva established the Laboratory of Electron Microscopy which she led for 30 years (1960-1990).

In 1968 Anna Boyadjieva acquired her habilitation as Associate Professor followed by full professorship in 1981 after successfully defended dissertation for Doctor of medical sciences. Prof. Boyadjieva was Scientific Secretary (1972-1986), Deputy Director (1986-1990) of the Institute of Morpholgy.

Since the first years of her research activity in the Institute, Anna Boyadjieva enthusiastically and persistently applied electron microscopy in cytology and histology. Leading the Electron Microscopy Laboratory for more than 30 years, she actively contributed to its development and establishment as a laboratory for modern ultrastructural studies in Bulgaria. In 1977 she introduced scanning electron microscopy into scientific investigations in the Institute of Morphology. Her great contribution is equipping the Institute with two electron microscopes – transmission (EM Opton 109) and scanning electron microscope (Jeol JSM-35).

Prof. Boyadjieva was a beloved lecturer in electron microscopy at the Faculty of Biology of Sofia University "St. Klimen Ohridski". As a scientist with national and international recognition, Anna Boyadjhieva was devoted to young researchers supporting and encouraging their scientific development in the field of electron microscopy.

Prof. Boyadjieva published more than 100 scientific papers. She is author of 5 inventions, 1 monograph, 1 practicum for electron microscopy.

The remarkable scientific achievements by prof. Boyadjieva are of fundamental importance for elucidation of the mechanisms of gametogenesis and gonadogenesis. Pioneer are her comparative ultrastructural studies on the ovarian cellular populations of different classes of vertebrates. In 1965 Anna Boyadjieva in co-authorship with Asen I. Hadjiolov, Jores Jordanov and Marlena Anastassova-Kristeva described electron microscopic characteristics of Corpus Balbiani in embryonal chicken ovary. Prof. Boyadjieva introduced ultrastructural histochemistry and developed numerous original methods, some of which were assessed as inventions. She created new methods for observation of isolated cells by scanning electron microscope. Applied contributions by Anna Boyadjieva are of great importance for the development of radiobiology, hybridoma biotechnology, diagnosis and treatment of infertility in domestic animals by assisted reproductive technology.

Prof. Boyadjieva was a member of several national and international scientific societies – International Association of French Speaking Anatomists, Bulgarian Anatomical Society, Union of Scientists in Bulgaria.

She received several honorary awards – from the Government of Korea for her participation in the military medical brigade (1956); the order "Sts. Cyril and Methodius" 2<sup>nd</sup> degree" for her remarkable contribution for the development of electron microscopy in Bulgaria, a medal from BAS.

Professor Anna Boyadjieva will be remembered with her distinctive features – prominent enthusiastic leader with unique sence of humor, erudition and glamour, nobility and dedication, active public position and humanism.

Nina Atanassova