

## Statement

From Associate Professor Alexander Evlogiev Aleksandrov, Ph.D.

Head of the Department of Forensic Medicine and Deontology

Medical University of Sofia

Subject: Dissertation for the award of the educational and scientific degree "DOCTOR" in the field of higher education 7. "Health and sport", professional direction 7.1. Medicine.

Topic: "Forensic Auricle Identification"

Author: Dr. Deyana Georgieva Velkova

By Order No. R-109-260/ 15.05.2023 of the Rector of the Medical University "Prof. Dr. P. Stoyanov" - Varna, I have been appointed to be a member of the Scientific Jury, and with the Minutes of its first meeting in absentia, I have been appointed to present an opinion on the procedure for acquiring the educational and scientific degree "Doctor" to Dr. Deyana Georgieva Velkova full-time doctoral student in the Doctoral Program in "Forensic Medicine" at the Medical University "Prof. Dr. P. Stoyanov" - Varna, Faculty of Medicine, Department of General and Clinical Pathology, Forensic Medicine and Deontology, in the field of higher education: 7. Health care and sports, professional direction: 7.1. Medicine

### **I. I. Brief biographical data on the candidate's career development**

Dr. Deyana Georgieva Velkova graduated from NMHS ..prof. Emanuil Ivanov", city of Kyustendil with profile "Biology and health education" and graduated with a master's degree in medicine at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna in 2016. In 2017, he began his professional career as a specialist at the "Forensic Medicine" Clinic, Sveta Marina Hospital, Varna, and as an assistant in the "Forensic Medicine" Department at the Department of "General and Clinical Pathology, Forensic Medicine and Deontology" at the MU. Prof. Dr. Paraskev Stoyanov" - Varna. From 2021, he also acquires a speciality in "Forensic medicine and deontology".

Dr. Velkova was enrolled by order No. R-109-449/ 28.10.2020 for full-time doctoral studies on the topic of "Forensic medical identification of the auricle". In connection with his dissertation work, he has one full-text publication as the sole author in a Bulgarian journal and participation with a poster in a scientific conference.

Dr. Velkova is a member of the International Academy of Legal Medicine, Forensic Anthropology Society of Europe, British association for Human Identification, Bulgarian Society of Forensic Medicine, Bulgarian Medical Association.

### **II. General presentation of the candidate**

The presented set of materials on paper/electronic media is in accordance with Art. 69 /1/ of the procedure for acquiring the educational and scientific degree "Doctor" in the Regulations for the development of the academic staff at the MU-Varna, including all the required documents. The dissertation is presented on 114 pages, illustrated with 40 figures and 39 tables. The PhD student has attached 1 full-text publication and 1 report. The presented bibliography covers 123 literary sources, 22 of which are in Cyrillic. A large part of the sources have been published in indexed international forensic medical journals /Forensic Science International, Australian Journal of Forensic Sciences, Int J Legal Med, Egyptian Journal of Forensic Sciences /.

### **III. Significance and relevance of the topic**

The aim of the dissertation work is to perform an anthropometric analysis of the auricle in male and female individuals from the Bulgarian population, and to use it as an age and gender predictor in the field of forensic anthropology. At the modern stage of the development of anthropology, due to the presence of racial, population and evolutionary differences, there is still a lack of a universal method for determining sex, age and race. Therefore, it is necessary for the forensic anthropologist to examine the maximum number of anatomical structures in order to achieve the most reliable identification. To achieve it, five tasks have been set. Formulated tasks allow the set goal to be achieved.

### **IV. Knowing the problem**

The literature review and cited sources show a thorough knowledge of the problem discussed in the dissertation by the doctoral student. The doctoral student presents in sufficient detail the role of the auricle as an identification sign in determining age, sex, race and the presence of disease.

Anthropometric studies of the auricle in the Bulgarian population supporting forensic identification are few in number and focused on different characteristics of the auricle, but without taking into account gender and age differences.

### **V. Research methodology**

The chosen methods used by the doctoral student are modern, tailored to the purpose and tasks. The author has succeeded in presenting the importance of the anthropometric study of the auricle in the field of forensic anthropology.

### **VI. Characterization and evaluation of the results and contributions of the dissertation work**

In the dissertation, Dr. Velkova formulates 3 contributions of a theoretical nature and 2 of an applied-practical nature, which are the result of the clearly set tasks, their precise implementation and the informative value of the scientific development.

### **VII. Assessment of the PhD student's publications and personal contributions**

Dr. Velkova is the author of 1 full-text publication in a Bulgarian journal, being an independent author, which is on the topic of the dissertation work. Participation in a scientific conference is also presented.

### **VIII. Abstract**

The abstract is written and formatted according to the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the regulations of the University of Varna and reflects the research methods, the results achieved, their discussion, recommendations as well as conclusions and contributions. Publications related to the dissertation work are also presented. The abstract is presented on 75 pages, illustrated with 39 tables and 19 figures, accurately representing the dissertation work.

### **IX. CONCLUSION**

The presented dissertation examines an important forensic and criminological topic related to the identification of the person - a current problem in science and practice.

The complex of methods used provides new knowledge that contributes to the development of forensic identification with significant theoretical and applied contributions that have an original character.

The dissertation meets all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for the Implementation of the LDASRB and the Regulations of the MU - Varna.

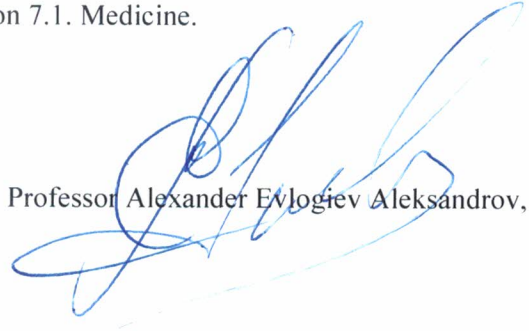
The dissertation work shows that Dr. Deyana Velkova possesses in-depth theoretical knowledge and professional skills, demonstrating qualities for independent conduct of scientific research.

The above gives me reason to confidently give a positive assessment of the presented dissertation work and I propose to the respected scientific jury to award the educational and scientific degree "Doctor"

to Dr. Deyana Georgieva Velkova in the doctoral program in "Forensic Medicine" in the field of higher education 7. Healthcare and sports, professional direction 7.1. Medicine.

20.06.2023г.

Associate Professor Alexander Evlogiev Aleksandrov, Ph.D.

A handwritten signature in blue ink, consisting of several loops and flourishes, positioned above the printed name of the signatory.