

## **STATEMENT**

by

**Professor Slavi Dimitrov Delchev, MD, PhD**  
**Department of Anatomy, Histology and Embryology,**  
**Faculty of Medicine, Medical University - Plovdiv**

**Regarding:** Competition for the occupation of the academic position of 'Associate Professor' in the scientific specialty code 01.06.01 Anthropology in the "Anthropology and Anatomy" section, Institute of Experimental Morphology, Pathology and Anthropology with Museum - Bulgarian Academy of Sciences, announced in SG No. 43/10.06. 2022.

By order No. RD-09-34 dated 28.06.2022 of the Director of the Institute of Experimental Morphology, Pathology and Anthropology with a Museum, I have been appointed as a member of the scientific jury of a competition for the academic position of 'Associate Professor' at IEMPAM - BAS by area of higher education 4, Natural sciences, mathematics and informatics, professional direction 4.3 Biological sciences (Human anatomy – Anthropology).

### **1. Presentation of the procedure and the candidate**

Only **one candidate** submitted documents for participation in the announced competition:

Diana Hristova Toneva, Chief Assistant Professor, "Anthropology and Anatomy" section, Institute of Experimental Morphology, Pathology and Anthropology with Museum - BAS.

The set of materials presented by Diana Toneva in electronic format is in accordance with the Regulations for the conditions and procedures for acquiring scientific degrees and for holding academic positions in IEMPAM - BAS, and includes the following documents:

- application form, curriculum vitae, master's degree, doctor's degree, list of scientific works, certificate of work experience, documents for academic work, documents for research work, annotations of materials (publications, citations, scientific projects, scientific forums)

The candidate Diana Toneva has submitted a total of 19 scientific works, which are after the acquisition of the PhD degree and after the academic position of "Chief Assistant Professor". All publications are in foreign journals, including participation in a book chapter.

A list for participation in 6 research projects is presented, of which 4 belong to the Scientific Research Fund.

A list for participation in a total of 41 scientific forums is presented - 12 abroad and 29 national with international participation.

The documents submitted by the candidate for this competition are comprehensive and correctly arranged, without any objections to their authenticity.

### **Brief biography of the candidate**

Diana Hristova Toneva obtained a Bachelor's degree in Biology and Chemistry from the University 'St. Kliment Ohridski' in 2003, and in 2005 she graduated as a "Master" in General Anthropology, majoring in Biology. From 2009 to the present, she worked as a specialist with a higher education (2009-2011), assistant professor (2011-2012) and chief assistant professor (since 2012 to

the present) at IEMPAM-BAS. In 2010, she obtained the educational and scientific degree "PhD" in Anthropology.

The candidate has completed an intensive course on digitization and creation of replicas of cultural heritage objects and on the use of new technologies and mobile applications for museums /May 2015. Smart Fab Lab workshop, UASG/ (The course was conducted within the framework of a European project on 7th Framework Program AComIn: Advanced Computing for Innovation FP7-REGPOT-2012-2013). Her scientific research and analytic studies involve the use of numerous specialized software products for image analysis.

The candidate is very good in a team working, as well as has skills for organizing, conducting and analysing anthropological research. From the references presented, it can be seen that the candidate knows how to plan, manage and coordinate scientific projects. Diana Toneva is the head of 2 projects (one of which is at the Scientific Research Fund) and a member of the teams of 4 scientific projects (of which 3 are at the Scientific Research Fund).

The author possesses the necessary qualities for a very good presentation of scientific reports, an excellent command of anthropological terminology and an in-depth discussion of the specific topic.

## **2. Summarized data on the scientific production and the activity of the candidate**

### *Evaluation of the scientific and scientific-applied activity of the candidate:*

The candidate presented a total of 19 articles: presented scientific reports – 41 (of which – 12 at foreign forums and 29 at national ones). The articles can be distributed by importance as follows: articles in publications with SJR – 18 items, by place of publication - articles in refereed international journals – 18 items (Q1 – 4 items, Q2 – 8 items, Q3 – 5 items, Q4 – 1 item), articles in journals with an impact factor – 14 items, by language in which they were written (in English – 18 items). The candidate is first author in 7 of the presented publications. By number of co-authors, the distribution is: with three or more co-authors - 19 issues. She is a co-author in writing a chapter of a book published by a foreign publishing house.

Chief assistant professor Diana Toneva was awarded the "Prof. Dimitar Kadanov" for publication activity in the period 2019-2021 - award of the Bulgarian Anatomical Society and award for the best poster at the XXV National Congress of the BAS (28-30.05.2021, Pleven, Bulgaria).

The candidate **has fulfilled** the required criteria for the development and growth of scientists of IEMPAM - BAS for publications in journals with IF, with quartile or thematic collections published abroad.

### *Contributions (scientific, scientific-applied, applied) and citations*

Chief assistant Diana Toneva has many years of experience in the field of anthropology. Her scientific research is mainly focused on forensic anthropology, virtual anthropology and gross anatomy. This type of research is labour-intensive and requires very good planning, organization of the conduct and subsequent processing of the collected data. The candidate's participation in 6 scientific projects is indicative of her professional qualities. The results of the studies have been thoroughly interpreted and published in specialized scientific publications.

The main scientific and scientific-applied contributions can be attributed to the category of new knowledge and enrichment of existing knowledge. One part of anthropological research is on the development of methods for the identification of human bone remains. For the first time, new models for determining sex based on metrical characteristics of the entire skull or its parts have been applied. The morphological changes in the microstructure of the cranial sutures that occur in the process of age-related obliteration were investigated. Another area of her work focuses on the reliability and accuracy of measurements made on 3D skull models generated by laser scanning, as well as measurements made on digital radiography images. A third group of the candidate's scientific activity is the study of different anatomical variations of the skull, and for each variation the aetiology and potential clinical aspects are discussed. The candidate's scientific publications in these areas have numerous citations in foreign scientific publications, which is indicative of their importance. The presented reference for citations completes the impression of the candidate - 168, of which 40 were presented in the competition and are in international refereed publications. The citations are entirely on the scientific works developed by Diana Toneva.

The candidate has reviewed 22 articles in international scientific publications.

### 3. Critical notes and recommendations


I have no critical remarks on the presented scientific papers and materials by the candidate. The areas of scientific interests of Chief Assistant Professor Diana Toneva have very good traditions in IEMPAM - BAS, which gives an excellent perspective for further development and expansion of her scientific research, with the participation of young scientists and doctoral students.

### CONCLUSION

The career development of Diana Hristova Toneva (Chief Assistant Professor for 10 years), her scientometric indicators, contributions from her research activities, fully correspond to the requirements laid down in the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the Implementation of the National Research Council of the Republic of Bulgaria and the Regulations of IEMPAM - BAS for occupying the academic position 'Associate Professor'. In the works of the candidate, there are original scientific and applied contributions that have received national and international recognition, the main part of which has been published in authoritative international journals.

Acquaintance with the materials and scientific works presented in the competition, the analysis of their significance and the scientific and scientific-applied contributions contained in them, gives me the reason to give a **positive assessment** to Chief Assistant Professor Diana Toneva and to recommend to the members of the esteemed scientific jury to **support** her selection for the academic position 'Associate Professor' at the "Anthropology and Anatomy" section at IEMPAM - BAS.

28 September 2022

Statement prepared by:   
Professor Slavi Delchev, MD, PhD