# **SCIENTIFIC OPINIAN**

## by Assoc. Prof. Milka Asparuhova Nashar, PhD

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related to: competition for holding the academic position of 'Associate Professor" in the field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.3. Biological Sciences, Scientific Specialty "**Biology**"

### Information about the competition

The competition has been announced in SG  $N_{2}$  14/18.02.2022 for the needs of the Department of Biology, Faculty of Pharmacy, Medical University of Varna, According the Order  $N_{2}$  109-159/14.04.2022 of the Rector of Medical University of Varna I am a member of the Scientific Jiry. During the first meeting of the Jury I was appointed to prepare a Scientific Opinion.

The only applicant in the competition is Chief Assist. Prof. Galina Aleksieva Yaneva, PhD from the Department of Biology, Faculty of Pharmacy, Medical University of Varna.

#### Brief information about the applicant

Galina Yaneva began her professional career as a medical laboratory assistant in the Serological Laboratory at the Skin and Venereal Diseases Clinic, St. Anna Hospital, Varna. Since 2005, after graduation with a Master's degree in biology she works as a biologist in the immunohistochemical laboratory at the Clinic of General and Clinical Pathology in St. Marina Hospital, Varna. Since 2009 Galina Yaneva was appointed as an assistant in the Department of Biology at the Faculty of Pharmacy of MU-Varna, where she continued to upgrade her education and to work on her professional promotion. In 2016 she acquired a specialty in Medical Biology. In 2018 she defended a dissertation for the acquisition of educational and scientific degree "Doctor" in the scientific specialty "Medical Biology". Since 2019 Yneva is Chief Assistant in Biology in the same department.

## Fulfillment of the requirements for holding the academic position "Associate Professor"

The applicant has submitted all required documents in accordance the Law of the Development of the Academic Staff of Republic of Bulgariq and the Regulation of the Development of the Academic Staff of Medical University of Varna for holding the academic position of "Associate Professor". All submitted documents and evidence materials are arranged in a proper order.

As can be seen from the submitted Reference for fulfillment of the minimum national requirements for holding the academic position"Associate Professor" and also from the presented evidences, the applicant fulfills the required minimum of 400 points with the total score of **456**, summarized from all groups of Scientometric indicators (table 1):

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Groups of indicators	Content	Minimal requirements for holding the academic position "Associate Professor"	Chief Assist. Galina Yaneva
А	Indicator 1	50	50
В	Indicator 2	-	
С	Indicator 3 or 4	100	100
D	Indicators 5 - 10	200	254
Е	Indicator 11	50	52
	SUMMARY	400	456

**Table 1.** Fulfillment of the minimal national requirements for holding the academic position"Associate Professor" by Galina Yaneva:

For participation in the competition Yaneva submitted 17 scientific papers after acquiring ESD Doctor, as follows: 1 monograph and 14 articles in scientific journals indexed in the Web of Science and / or Scopus databases, 3 of which with Impact Factor (IF). The total impact factor of the publications submitted for participation in the competition is 10,316. The main asset of scientometric data in group D is of indicator 7. According to the presented list of citations, the scientific works of Galina Yaneva are cited 26 times in the databases with scientific information Web of Science and Scopus.

### **Evaluation of the teaching activities**

According to the submitted Reference for the last 5 years, Yaneva was assigned an average of 490 academic hours per year, of which 44 hours lectures. Most of the assigned classes are biology in English for foreign students in Medicine and Dental Medicine. The fact that Assist. Prof. Yaneva leads lectures, points her active participation in the teaching activities of the department and shows her good training for academic promotion.

## Summary assessment of the main scientific contributions

In the published in English monograph, Yaneva makes a systematic review of conventional and modern high-tech methods for diagnostics of breast cancer worldwide. The results of the author's own research on a group of 128 patients with breast cancer could have significant scientific and applied contribution. The author presents an in-depth study of the histological types and molecular subtypes of the disease with respect to the stage of differentiation, the presence of both positive or negative expression of estrogen and progesterone receptors and receptor 2 for epidermal growth factor. The identified combinations of positive and negative receptors in different groups of patients provide an important basis for developing an algorithm for precise diagnostics and individual treatment approach.

According the papers submitted for participation in the competition, the scientific interest of Chief Assist. Prof. Yaneva are in scientific areas, as follows:

1) Dermatoglyphics of breast cancer: this is the topic to which most of the previous scientific work of applicant is dedicated. Important results have been obtained from analyzes of the main quantitative and qualitative dermatoglyphic indicators in women with breast cancer compared with healthy women. An important contribution is the confirmed prognostic value of both finger and palm dermatoglyphic characteristics as a reliable, non-invasive and

accessible biomarker in individuals with a genetic predisposition to this socially significant disease (*publications*  $N_{2}$  1, 2, 3).

2) Diagnosis, epidemiology and social significance of breast cancer: valuable data on various aspects of quality of life after breast cancer treatment are presented. The results summarizing data on the psycho-emotional and social impact of the disease on the studied patients provide a basis for further investigations in the direction of improving their quality of life. (*publication*  $N_2$  14). An integrated assessment of the application of modern approaches to the diagnosis of breast cancer has been made (*publication*  $N_2$  15).

4) Ethnobotany of medicinal plants and wild mushrooms, botany of new species and ecological toxicity of lichens: Interesting data are presented on the attitudes and knowledge of the population in the district of Varna for the use of edible wild mushrooms, as well as on the recognition of poisonous counterparts of some of them. In addition, a correlation of these data with the demographic characteristics of the respondents was also presented. A review article systematizes new information on the ecology, phytogenetics and biology of lichens, focusing on their potential for toxicity due to the accumulation of toxins from fungi or cyanoprokaryotes that are part of these symbiotic units. Undoubted contribution in this scientific field of interest are the data describing newly classified plant species in countries of Southeast Europe, incl. Bulgaria - research in collaboration with colleagues from Serbia (publications  $N_2$  4, 5, 6, 8 and 9).

5) In vitro fertilization: the main contribution in this field of interest is the identification and systematization of the risk factors that need to be taken into account when monitoring certain pregnancies in order to achieve a successful outcome (*publications*  $N_2$  10, 11 and 12).).

6) Application of ozone in COVID-19 pandemia: Undoubted contribution to studies on a topical issue - reviews of ozone in the COVID-19 pandemic are presented, in terms of ozone chemistry as an air pollutant and a powerful antioxidant and as a disinfectant and therapeutic agent due to its pronounced antiviral activity (publications  $N_{2}$  13 and 16)

7) Role of alternative RNA maturation in malignancies: An in-depth review study presenting the crucial role of alternative RNA maturation in malignant transformations, and especially its role in the development of resistance of tumor cells to chemotherapy. The question of deciphering the variants of alternative RNA maturation in tumor cells in order to overcome drug resistance by designing new effective chemotherapeutics is considered.

### Conclusion

Based on the analysis of the submitted scientific papers and documents, I believe that Chief Assist. Prof. Galina Aleksieva Yaneva meets all requirements Law of the Development of the Academic Staff of Republic of Bulgariq and the Regulation of the Development of the Academic Staff of Medical University of Varna for holding the academic position of "Associate Professor". Yaneva is an established specialist, scientist and lecturer, with the potential for even greater contribution to the teaching and research activities of the Department. In conclusion, I declare my positive assessment and highly recommend to the members of the Scientific Jury to vote positively for awarding the academic position of "Associate Professor" in Biology to Chief Assist. Prof. Galina Aleksieva Yaneva in the field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.3. Biological Sciences, for the needs of the Department of Biology at the Faculty of Pharmacy, Medical University "Prof. Dr. Paraskev Stoyanov".

16.06.2022 г Varna

Signature: /Assoc. Prof. M. Nashar, PhD/