

**To the President of the Scientific Jury,**

**Appointed by order of the Rector of  
Medical University –Varna**

**№ R-109-392/20.09.2021**

**Attached I present: Review**

for a competition for 1 academic position "Associate Professor",  
in the scientific specialty "Epidemiology",

Professional field 7.1 "Medicine",

Field of higher education 7. "Health and Sport",

announced in SG № 61/23.07.2021, for the needs of Medical University -Varna, Department  
of Hygiene and Epidemiology, of the Faculty of Public Health,

**Reviewer: Prof. Dr. Irena Atanasova Mladenova - Hristova, MD,**

Scientific specialty: Epidemiology

Institution: Faculty of Medicine, Thracian University, Stara Zagora, Head of the Department  
"Hygiene, Epidemiology, Microbiology, Parasitology and Infectious Diseases"

Address and contacts:

Postal address: 6000 Stara Zagora, 11 "Armeiska" str.

E-mail address: [imladenova@yahoo.com](mailto:imladenova@yahoo.com)

The review has been compiled in accordance with the requirements of the law on development  
of the academic structure in the Republic of Bulgaria and the Regulations for its application.

## REVIEW

According to the announced competition for 1 academic position "Associate Professor", in the scientific specialty "Epidemiology", 1 candidate has submitted documents - Chief Assist.

Prof. Dr. Eliyana Panayotova Ivanova, MD, from the Department of Hygiene and Epidemiology, Faculty of Public Health, Medical University of Varna.

There are no violations of the competition procedure.

### **I. Analysis of the career profile of the candidate Chief Assist. Prof. Dr. Eliyana Panayotova Ivanova, MD.**

Chief Assist. Prof. Dr. Eliyana Panayotova Ivanova, MD, graduates her higher education in the specialty of medicine at the Medical University of Varna in 1992. From 1993 until 1997 works at the Epidemiological department of the Hygienic-epidemiological inspection in Burgas, as a doctor - resident, then until 2008, as a senior and chief sanitary inspector in the Anti-epidemic control department at the Regional Health Inspectorate – Varna. In 2006, Dr. Eliyana Ivanova acquired the specialty "Epidemiology of Infectious Diseases". From 2008 until 2013 works as an epidemiologist at the Medical Centre "Sanita" – Varna. In 2013, after winning a competition, she was selected as an assistant professor of epidemiology in the Department of Infectious Diseases, Epidemiology, Parasitology and Tropical Medicine, at the Medical University of Varna.

In 2017 successfully defended a dissertation for the educational and scientific degree "Doctor" on the topic: "Epidemiological effectiveness, organization and management of immunization in the Varna region."

### **II. General description of the submitted materials in the competition:**

**The documents submitted by Dr. Eliyana Panayotova Ivanova, MD**, meet the requirements of the law on development of the academic structure in the Republic of Bulgaria and the Regulations for its application, concerning the academic position of "Associate Professor" - administrative documents for participation in the competition, monographic work, copies of scientific publications, participation in scientific forums, etc., on electronic media, with sufficient material on all evaluation criteria and minimum requirements, by groups of indicators, for the academic position "Associate Professor".

### **III. Evaluation of the candidate's scientific works for the overall academic development.**

#### **General characteristics of the scientific production and publishing activity**

The general publishing activity of Chief Assist. Prof. Dr. Eliyana Ivanova consists of 33 scientific papers. 12 of them are part of the evidence material in the reference for fulfilment of the minimum requirements for the academic position of "Associate Professor", as in accordance with the law on development of the academic structure in the Republic of Bulgaria, as well as 3 publications, outside of the evidence material; dissertation work; monograph; chapter of a collective monograph. The full-text articles are 27: related to the dissertation - 3; for chief assistant - 12; for associate professor - 12

The scientific interests and papers of Dr. Eliyana Ivanova are in a wide range – immune prophylaxis and epidemiology of vaccine-preventable infections; epidemiology of airborne, intestinal, transmissible and direct infections of tissues and mucous membrane, as well as infections with multiple transmission mechanisms; health promotion; nutrition and dietetics.

Dr. Ivanova speaks English and Russian.

#### **IV. Evaluation of the monographic work and the publications submitted by the candidate for participating in the competition for "Associate Professor".**

Chief Assist. Prof. Dr. Eliyana Ivanova, MD participates in the competition for the academic position of "Associate Professor" with the following scientific papers:

**Monograph** – Ivanova E. Epidemiological chronicles of the fight against infectious diseases in the Varna region (1878 - 1944), 2021, ISBN 978-619-221-336-7

Chief Assist. Prof. Dr. Eliyana Ivanova presents, in the monographic work dedicated to the fight against infectious diseases in the Varna region (1878–1944), a historical overview and epidemiological assessment of the spread of acute infectious diseases in the Varna region from the Liberation until the middle of the twentieth century.

Considered are the quarantine measures imposed by European countries during this period to control the plague and cholera epidemics: the construction of sanitary cordons at the borders, infirmaries for isolation and treatment of patients. Unorganized attempts to "variolize" the population against smallpox are one of the first clinical trials of methods and tools to combat smallpox. Reviewed is also the health legislation in Bulgaria, in the part that regulates the structure and organization of the epidemiological and sanitary supervision and control in the

country, as well as the measures for combating the epidemic spreading infectious and social diseases.

The protection of our sea border from the import of pandemic and exotic infectious diseases for our latitudes is entrusted to the Quarantine Sanitary Service in the city (1847-1942).

**Chapter from a collective monograph** – Ivanova E., Development of the bacteriological and anti-rabies station 1925-1950, 150 years of donation hospital “Paraskeva Nikolau”, 150 years in the service of health care in Varna, Anniversary book, Medical University - Varna, 2019, 84 - 95

**Publications in scientific journals, referenced and indexed in world-famous databases with scientific information** (*Scopus u Web of Science*) - 6;

Five of the publications are in the Journal of IMAB, which is referenced and indexed in Web of Science and 1- in Scopus (according to the academic transcript).

**Publications in unreferenced journals**, with scientific review, or published in edited collective volumes - 19 (6 of them are part of the competition for "Associate Professor" - from the academic transcript);

**Participation in international scientific forums** - 9.

**Out of 33 scientific papers:**

-First / independent author -14 including the monograph;

-Second author - 5

-Third / next author - 14 publications.

**Distribution of scientific works in different directions/areas of epidemiology:**

**Immune prophylaxis and epidemiology of vaccine-preventable infections: total 8**

A\_1; B\_3; C\_7-2; C\_7-5; C\_7-6; C\_8-1 ; C\_8-2; C\_8-5 ;

**Epidemiology of airborne infections: total 4**

A\_1; B\_3; C\_7-2; C\_8-6

**Epidemiology of intestinal infections: total 1**

B\_3

**Epidemiology of blood-borne infections: total 3**

A\_1; B\_3; C\_7-4;

**Epidemiology of direct infections of tissues and mucous membrane: total 3**

**A\_1; B\_3; C\_9**

**Epidemiology of infections with multiple transmission mechanisms: total 1**

**C\_8-4**

**Health promotion and nutrition: total 3**

**C\_7-1; C\_7-3; C\_8-3**

The original scientific contributions of Chief Assist. Prof. Dr. Eliyana Panayotova Ivanova, MD, are mainly related to the immune prophylaxis and epidemiology of vaccine-preventable infections, including in-depth epidemiological study and analysis of changes in the organization and management of immunization works in the Republic of Bulgaria, and specifically in Varna region, from 1878 until 2015, presented in the dissertation, monograph and five articles. Analysed is the epidemiological effectiveness of immune prophylaxis and its influence on the dynamics of epidemic processes in vaccine-preventable infections: tuberculosis, polio, tetanus, measles, mumps, rubella, pertussis and viral hepatitis type B in the Varna region in the period 2005 – 2015. Studied was also the algorithm of registration and reporting of adverse vaccine reactions, reported are the manifestations and frequency of reactions and the significance for immunization practices. Developed is an applicable program for improving the epidemiologic effectiveness of immunization works in Varna region.

Dr. Ivanova studied the morbidity of viral hepatitis type B, in Varna region, for the period 2005 - 2015, as well as the immunization coverage of the subject contingent. Examined was also the data from the Regional Health Inspectorate – Varna from the microbiological monitoring of the coastal bathing waters, in the region of Varna for the period 2012-2016, and the assessment of the water quality has been studied. Proposed was the improvement of the water supply and collection system in region Varna.

Summarized are the results of the applied activity on the epidemiological control over the tick populations for the period 2002 - 2017 in Varna region, with an established high level of tick activity and prolongation of the seasonal activity of the vectors, emphasizing on systemic surveillance of tick populations.

Dr. Eliyana Ivanova studies the main characteristics of the epidemic process in tetanus, for the period 2005 - 2015, in Varna region, and the immunization coverage of the population by age groups. In the conditions of mass immune prophylaxis, the disease is maintained at a sporadic level. The disease mainly affects people with irregular immunizations and re-immunizations. Defined are two directions in the strategy for achieving successful epidemiological control and elimination of tetanus: increasing the scope with regular re-

immunizations of adults and strict compliance with the requirements for emergency TT - injury prevention.

**V. Citation of the candidate's publications in the national and foreign literature (publication image).**

The scientific works of Dr. Eliyana Ivanova 8 positive citations, in Bulgarian and foreign scientific publications: 7- in monographs/collections, 1- in Knowledge - International Journal.

**VI. Complex, qualitative assessment of the education-methodical and teaching activity, including scientific guidance of students, doctoral students, postgraduates.**

Dr. Eliyana Ivanova, MD, teaches epidemiology of infectious diseases to medical students, dental medicine students, inspectors of public health, protection and control of the public health, health management, health care management, nurses, midwives, medical laboratory technicians at the Medical University - Varna. She is responsible for the administrative activity. She has a total research and teaching experience of 8 years.

For the 2016/2017 school year, Dr. Ivanova has 359 academic hours. In 2017/2018 - the study load is 404 hours; for 2018/2019 school year - 405; for 2019/2020 school year - 385; for 2020/2021 school year- 440 hours, the mandatory standard being 360 teaching hours.

**VII. Critical remarks and recommendations.**

I recommend Chief Assist. Prof. Dr. Eliyana Ivanova, MD, to publish more of her research in scientific journals, referenced and indexed in the world-famous databases Scopus and Web of Science.

**Table 1. Minimum required points by groups of indicators for the academic position "Associate Professor"**

Groups of indicators	Content	Associate Professor (points) (400 points)	Chief Assist. Prof. Dr. Eliyana Ivanova (420,57 points)
A	Indicator 1	50	50 points
B	Indicator 2	-	-
C	Indicator 3 or 4	100	100 points

D	Sum of indicators from 5 to 9	200	<b>215,57points</b>
E	Sum of indicators from 10 to 12	50	<b>55 points</b>
F	Sum of indicators from 13 till the end	-	-

### VIII. Conclusion

The research and teaching activity of Chief Assist. Prof. Dr. Eliyana Panayotova Ivanova, MD, covers and exceeds the mandatory minimal national requirements for the scientific and teaching activity for taking the academic position of "Associate Professor", as per the current law on development of the academic structure in the Republic of Bulgaria and its applicable regulation.

I will vote firmly "for" the candidacy of Chief Assist. Prof. Dr. Eliyana Panayotova Ivanova, MD, for taking the academic position of "Associate Professor", in the scientific specialty "Epidemiology", professional field 7.1. "Medicine", field of higher education 7. "Health and Sports", at the Department of "Hygiene and Epidemiology", at the Faculty of Public Health, at Medical University –Varna.

**10.11.2021**

**Stara Zagora**

**Signature:**



**Prof. Dr. Irena Mladenova – Hristova, MD**