#### **Review**

Reviewer: Prof. Evgenia Dimitrova, DSc, Department of TMKT, NSA "Vasil Levski", Sofia

of materials submitted for participation in a competition to occupy the academic position "Professor" in the professional direction 7.4. Public health specialty "Public Health Management"

In the competition for professor, announced in the State Gazette, issue 7/23.01.2024 for the needs of the department "Medical laboratory assistant" at the Medical College - Varna, as the only candidate involved **Associate Professor Emilia Georgieva**, **Ph.D.** When the competition is announced the requirements of the Law for development of the academic staff of the Republic of Bulgaria, and its rules of application are met.

### 1. Short biographical data

Assoc. prof. Emilia Georgieva, Ph.D. graduated from Medical College, Varna, professional bachelor in "Medical Laboratory Technician" (1995) and bachelor in "Health Care Management" (2008). She obtained a Master's degree in "Marketing" at the University of Warsaw - Varna (2010) and a Master's degree in "Health Care Management" at the Medical University, Varna, (2013). She has a specialty in "Public Health" (2023). She worked as a medical laboratory technician at the "St. Marina" Medical Center Varna (1995-2008), a medical representative of laboratory equipment, consumables, and reagents for scientific activity (2008-2012). She is a lecturer at "Medical Laboratory Assistant" Department at the Medical College at the Medical University "Prof. Dr. P. Stoyanov" - Varna (2012-2018). From 2018 she is an "associate professor", and from 2021 he is the deputy director of the college. She obtained the Ph.D. in "Management of health care" after successfully defending a dissertation on the topic: "Assurance with medical-laboratory services in general medical practice" (2016).

### 2. A general description of the materials presented

The candidate Assoc. prof. Emilia Georgieva, Ph.D., participates in the competition with the following scientific production:

- Dissertation work for the award of the Ph.D. 1 issue.
- Monographs -1 number on the topic: "Rapid tests, qPCR systems and mobile applications, the key in the fight against the SARS-CoV-2 pandemic" (2022).
- Articles in scientific journals in full text, published in referenced and indexed world-famous databases with scientific information (Scopus and / or Web of Science) - 11 numbers.
- Articles in scientific journals in full text, published in non-refereed journals with scientific review or published in edited collective volumes in international journals – 23 numbers.
- Published chapter of a collective monograph (1 issue) and 3 teaching aids in a collective of authors.
- Full-text publications in scientific journals and collections, beyond the minimum scient metric requirements for occupying the academic position of "professor" with an impact factor - 2 items.

The scientific works of Assoc. prof. Emilia Georgieva, Ph.D. are heterogeneous in thematic respect. All presented materials are precisely described and arranged. The requirements of the University of Varna for the scient metric indicators for occupying the academic position "professor" have been met.

# 3. Impact of the candidate's scientific publications in literature (known citations)

Assoc. prof. Emilia Georgieva, Ph.D. submitted information about 9 citations:

- Citations quoted in scientific journals, referenced, and indexed in world-famous databases with scientific information 5 issues.
- Citation in scientific journals, referenced and indexed in world-famous databases with scientific information - 1 issue.
- Citations quoted in the monographs and scientific peer-reviewed volumes –
  3 issues.

Total 100 points – corresponds to the minimum national requirements for the academic position of "Professor".

## 4. General characteristics of the applicant's activities

# 4.1. Educational and pedagogical activities (work with students and doctoral candidates)

Associate Professor Emilia Georgieva, Ph.D. is an established teacher in the specialty "Medical Laboratory Technician" and in the master's program "Health Care Management". She has over 23 years of experience in hospital structure and expert activity in commercial companies with the subject of work - medical devices and biological products, including 10 years of teaching activity at the Medical College - Varna. Leads lectures and exercises on "Trends in Laboratory Diagnostics - POCT", exercises on "Clinical Laboratory" and teaching practice on "Clinical Laboratory" and "Microbiology" with over 1000 hours of classroom employment during the last 4 academic years with a norm of 90 hours. Associate Professor Emilia Georgieva, Ph.D. participates in the conduct of semester exams and state exams for students to acquire the Bachelor's and Master's degrees in MK. She is a member of the committee for the protection of pre-graduate internships. Participates in the development, management, and review of study programs for compulsory and optional disciplines included in the curriculum of the MK, in accordance with the modern requirements for ensuring knowledge, skills and competences in the profession. She is the author of manuals, textbooks, monographs and other supporting materials related to the education of students. She is responsible for the successful accreditation preparation of the specialties at the Medical College and Medical University - Varna, actively participates in the organization of various events, forums, and conferences. Maintains a high level of continuing education by participating in specialization on "Good Practices in Bio-Laboratory Technology", Turino, Italy (2023), congresses and conferences in the specialty. She is the supervisor of two PhD students who have successfully defended their doctorates in the same specialty and four more are in the process of training. She combines his academic work with public commitments through participation in various initiatives as a member of the National Anti-Doping Center, the Bulgarian Association of Health Care

Professionals, the Bulgarian Scientific Society for Public Health, the National Association for Prevention and Therapeutic Training, etc.

### 4.2. Scientific and scientific applied activities

Of the 13 publications presented, Assoc. prof. Emilia Georgieva, Ph.D. is a leading author in 44 publications. She is the author of two monographs in which he presents the latest achievements and summarizes the trends in "Application of databases and electronic information systems in laboratory practice - status and prospects" and "Rapid tests, qPCR systems and mobile applications, the key in the fight against the SARS-CoV pandemic -2", with which he participated in the competition. She is a co-author of a university textbook "Methodology of practical training of students from the professional field of Health Care" and participated in a collective monograph "Professions in Medical College - Varna, The Road Continues, 80 years Medical College - Varna". She has participated in significant number (48) national and international scientific forums. She has the necessary teaching and research workload according to the regulations of MU-Varna.

### 4.3. Implementation activity

Assoc. prof. Emilia Georgieva, Ph.D. is the head of a university research project "Combination of essential oils from representatives of the Lamiaceae family and antibiotics reducing microbial resistance of important clinical isolates" and member of the research team of 2 more scientific projects. For her activity and professionalism, she was awarded a responsible position as the deputy director of the College, "Career Development, Quality and Accreditation" of MK - Varna. Associate prof. Georgieva organizes and motivates the teachers and students at the Medical College of the Medical University - Varna to participate in public initiatives and contributes to the establishment of the college and the university. She works actively to build good partnerships with other structures and helps to implement several successful initiatives with international and Bulgarian partners.

## 4.4. Contributions (scientific, scientifically applied, applied)

The scientific publications of Assoc. prof. Emilia Georgieva, Ph.D. in the field of antimicrobial drug resistance, the antibacterial effect of natural products,

interdisciplinary approaches to improve public health through the introduction of innovative methods and technological solutions have a significant scientific and applied contribution.

Five main areas of the author's research activity stand out:

- 1. Introduction of innovative technological solutions to improve time and access to medical laboratory services (A1; Publications, D8.2; D8.6; D8.11; D8.13 and D8.14 from the Academic Reference).
- 2. The role of the medical laboratory assistant, as part of the interdisciplinary team during the diagnostic and treatment process (Publications, D7.10 and D8.1; D8.4; D8.5; D8.7; D8.10; D8.16 and D8.18 of the Academic Reference).
- 3. Laboratory diagnostics as part of an integrated approach to diagnosis and control of chronic diseases (ВЗ; Publications, Д8.3; Д8.9; Д8.12; Д8.13; Д8.15; Д8.17 and Д8.22 from Academic reference).
- 4. Investigation of the antimicrobial effect of natural products (essential oils) alone and in combination with approved antibacterial dosage forms (Publications, D7.1; D7.2; D7.3; D7.4; D7.5; D7.6; D7 .11; and E-1; E-2 from Academic Reference).
- 5. New approaches in the fight against antimicrobial drug resistance (Publications, D7.7; D7.8; D7.9 and D8.19; D8.20; D8.21 from Academic Reference).

In terms of content, most publications and monographs are aimed at the search for new approaches and solutions through the introduction of laboratory tests to be performed by the patient at home, to improve the timeliness of the result and increase public satisfaction with laboratory research. The new laboratory capabilities are the key to a new integrated model that provides access and timeliness of laboratory results, supporting good self-management of patients with chronic diseases. Part of the publications have a significant scientific and applied contribution, another part has an original, theoretical, and practical-applied character. They contribute to validating existing practices, introducing innovations, and improving the quality of work and training.

## 5. Assessment of the applicant's personal contribution

The scientific publications presented for review establish a strong personal contribution of the applicant and good teamwork. I accept her self-assessment, indicated in the author's reference for the contributions of the scientific works, which correspond to the significance of the obtained results. I have not found plagiarism.

#### 6. Conclusion

The complete work of Associate Professor Emilia Georgieva, Ph.D. includes scientific and medical-diagnostic activity, teaching engagement, as well as administrative and management functions. Her scientific works contain scientific-theoretical and scientific-applied contributions that enrich laboratory science and practice and can find application in treatment-diagnostic activity, disease control and rehabilitation of the sick, as well as in the improvement of clinical laboratory training and health care management. The materials with which the candidate participates in this competition fully cover the requirements of the Law for development of the academic staff of the Republic of Bulgaria, and its rules of application, and the relevant Regulations of the Medical University Varna.

After getting acquainted with the presented materials and scientific works and on the basis of the scientific, scientifically applied and applied contributions contained in them, as well as on the basis of her long-term teaching and high professional qualification, I can confidently give a **positive** assessment of the overall scientific-research and teaching activities and I recommend to the Scientific Jury to propose Assoc. Prof. Emilia Georgieva, Ph.D. to be elected as a "professor" in the professional field 7.4. Public health, specialty "Public Health Management".

§1, б. "В" от Регламент (ЕС) 2016/679

12.04.2024

Prof. Evgeniá Dimitrova, DSc