

REVIEW OPINION

By Assoc. Prof. Tsvetelina Kostadinova, MD, PhD
Head of Training Sector "Medical Laboratory Assistant", Medical College
Medical University "Prof. Dr. Paraskev Stoyanov", Varna
Head of Virology Laboratory, UMBAL "St Marina" EAD

By Order №P-109-142/23.02.2023 of the Rector of Medical University "Prof. Dr. Paraskev Stoyanov" – Varna I have been appointed as a member of the scientific jury and according to Protocol №1/06.03.2023 I present my review opinion:

Regarding: Competition for awarding an academic position of "Associated Professor" in field of higher education 4. Life sciences, mathematics and informatics, professional direction 4.3 Biological sciences, scientific specialty Virology, announced in the State Gazette №102/23.12.2022 with a single candidate Chief Assist. Prof. Zhivka Stoykova Demireva-Kalcheva, MD, PhD

Short data about the carrier and qualification of the candidate:

Dr. Zhivka Stoykova Demireva-Kalcheva obtained a Master's degree in Medicine from Medical University "Prof. Dr. Paraskev Stoyanov", Varna in 2002. She began her carrier pathway as a resident doctor in the Emergency Center, Dobrich and Emergency Center, Varna. During this period she started her teaching experience as a part-time Assistant Professor in the Department of Hygiene and Disaster Medicine at Medical University Varna. In 2006, she was employed as a senior expert in the Regional Health Inspectorate Varna, Department of Microbiology and Virology. Since 2007 she has been elected as an Assistant Professor in the Department of Microbiology and Virology at Medical University Varna. Simultaneously, from 2009 until now she has developed her career in the Virology laboratory of UMBAL "St. Marina", Varna. In 2013 she completed her medical speciality in Virology. The accumulation of scientific and practical experience has resulted in the successful defence of PhD thesis "Seroepidemiological and molecular genetic studies of Cytomegalovirus infection in risk group patients".

Dr. Stoykova has obtained significant training and expertise qualification during different courses at national and international levels. In addition to her direct professional interests, she also followed a training module "Work with SPSS" for statistical and graphical representation of data. She has been trained in "Stem cell transplantation" and takes part in the regular weekly meetings for discussion of stem cell-transplanted patients in UMBAL "St. Marina" Varna.

Dr. Stoykova speaks fluently English ("Business Advanced Council of Europe Level C1" certificate), as well as the Russian language. She uses also German in her scientific and teaching activities and has excellent computer skills.

Scientific production presented by the candidate:

The submitted scientific production fully complies with and even exceeds the minimal scientific metrics.

The candidate has a successfully defended PhD dissertation "Seroepidemiological and molecular genetic studies of Cytomegalovirus infection in risk group patients", which counts for

50 points. She presents, as equal to the monographic work in Section B, 10 publications in referred and indexed journals (Web of Science and Scopus), each of which with 15 points or a total of 150 points (the required minimum is 100). The scientific publications in Section Г (Г7 and Г8) are 15, from which one book chapter, with a total of 210 points (the required minimum is 200). There is an additional publication with ten points.

I should mention that all of the submitted scientific publications are in English and are published in journals with an impact factor (7) and SJR (18), referred and indexed in leading scientific databases, which indicates the scientific significance and actuality of the studies. This is also supported by the official reference for the number of citations – 25 citations in scientific journals, referred and indexed in leading scientific databases (Web of Science and Scopus) (50 points).

The publications are practice-oriented and represent profound studies of actual problems in patients whose diagnosis and therapy are serious challenges. The scientific works focus on herpes viruses, especially CMV and EBV, and the risk of their reactivation in immunocompromised and transplanted patients. In another group of studies, the candidate presents results from patients affected by chronic viral hepatitis, as well as her experience with the COVID-19 pandemic.

Dr. Stoykova demonstrates her scientific potential and professional expertise via participation in 20 national and international scientific forums with a total of 28 oral presentations and posters. She was awarded in the 5th National Congress of Virology for the poster “BKV – a challenge for post-transplant patients“. Dr. Stoykova participates in four scientific projects of Fund “Science”, in one of which she was a leading scientist (“Study and analysis of HDV genotypes circulating in northeast Bulgaria”).

In conclusion, the presented publications reflect the scientific capacity and demonstrate excellent professional and practical experience. They show systematic consistency which is the base of the scientific profile and interests of Dr. Stoykova.

Scientific achievements and contributions:

During her academic development, Dr. Stoykova contributes actively in several directions with practical significance. In addition to her numerous studies of the herpes viruses in the vast region of northeastern Bulgaria, specific attention has to be paid to her findings about the spread of CMV and EBV in risky groups, such as pregnant women, patients with oncohematological diseases and transplanted patients.

Among the whole scientific production, I have to point out the analyses and contributions for the use of PCR in routine laboratory practice, as a method of choice for detecting reactivation of latent viral infections in patients with oncohematological diseases and after transplantations of solid organs and hematopoietic stem cells. Very useful for the practice is the calculated prognosis population risk of 7% for intrauterine transmission of CMV existing in the region. Her contribution to the laboratory diagnosis of herpes viruses is really valuable and can serve as a laboratory guideline.

I highly appreciate the presented research activity and its practical significance.

Academic teaching activity:

The presented reference № 099-112/12.01.2023 shows a total teaching experience of 15 years, 9 months and 24 days. She is engaged in Microbiology lectures and practical seminars for students in Medicine (Bulgarian and English language programme), Microbiology practical seminars for students in Dental Medicine (Bulgarian and English language programme), and Microbiology practical seminars for students in Pharmacy (Bulgarian language programme). She participates in developing protocols for practical students' training. Furthermore, Dr. Stoykova is a lecturer in the faculty discipline "Clinical Microbiology" for students in Medicine with the topic "CMV infection in risky groups. Actual approaches for diagnosis and therapy". From the official reference for the auditory engagement, issued for the last 5 years, it is evident that the number of academic hours largely exceeds the minimum of 220 teaching hours – for the academic 2021/2022 it is 18 lectures and 262 practical seminars, mainly in English. The presented documents support the remarkable teaching practice and experience. In addition, I should mention her willingness and professionalism in the training of post-graduate students.

Personal opinion:

Dr. Stoykova is well-organized, precise and consistent in her work. With a deep knowledge, persistence and ambition towards innovations, she is developing a successful scientific, clinical and teaching career. She has excellent communication and presentation skills. She knows how to transform the specialized scientific information in an interesting and accessible way. Dr. Stoykova has a responsible attitude towards all aspects of the academic domain and motivates the people in her working environment.

Conclusions:

The presented actual and original scientific production, based on own investigations of Dr. Stoykova is of high quality and significance, with a high potential to be implemented in the practice. The materials submitted for the competition fully comply with the minimal requirements of the Act for the development of academic staff in the Republic of Bulgaria and the Regulation for the development of academic staff in Medical University "Prof. Dr. Paraskev Stoyanov", Varna. The professional progress with a very active teaching activity, the well-established expertise, the scientific metrics and the personal qualities allow me to express my positive assessment. I strongly recommend to the respected scientific jury to award the academic position "Associated Professor" in field of higher education 4. Life sciences, mathematics and informatics, professional direction 4.3 Biological sciences, scientific speciality Virology for the needs of the Microbiology and Virology Department of Medical University Varna.

25.04.2023

Varna

Assoc. Prof. Tsvetelina Kostadinova, MD, PhD

