

**To the Members of the Scientific Jury,  
appointed by order No. R-109-142/23.02.2023  
of the Rector of the Medical University - Varna  
for the announced competition for AP "Associate professor"  
SG no. 102/23.12.2022**

**STATEMENT**

**from**

**Prof. Temenuga Zhekova Stoeva, MD, PhD  
Varna Medical University  
Department of Microbiology and Virology**

**On competition**

**for occupying the academic position "Associate Professor"  
in the field of higher education**

**4. Natural sciences, mathematics and informatics**

**4.3 Biological Sciences**

**scientific specialty "Virology"**

**for the needs of the Department of Microbiology and Virology  
to the Faculty of Medicine at the Medical University – Varna  
announced in SG no. 102/23.12.2022**

**with candidate Chief Assistant Professor Zhivka Stoykova Demireva - Kalcheva, MD, PhD**

**CAREER DEVELOPMENT**

Dr. Zhivka Stoykova graduated in Medicine from the Medical University - Varna in 2002. In the period 2003-2006 she works successively as a resident doctor in The Emergency Center - Dobrich and Varna. In the period September-December 2004 is a part-time lecturer at the Department of Hygiene and disaster medicine of the University of Varna, and since March 2007 was selected after a competition for a full-time assistant at the Department of "Microbiology and Virology". From June 2019 until now is a chief Assistant. In 2013 acquires the specialty "Virology". In 2018 she successfully defended a dissertation on the topic "Seroepidemiological and molecular genetic studies of cytomegalovirus infection in risk groups" for the acquisition of PhD degree in the scientific specialty "Virology". Since 2009 Dr. Zh. Stoikova works as a clinical virologist at University Hospital "Sveta Marina", Varna. Since 2007 to date, the candidate has

participated in numerous courses in the field of modern diagnostics of viral diseases and stem cell transplantation, trainings that support her professional development and research activity. Dr. Stoykova participated in 4 research projects under the Science Fund at the University of Varna in the period 2016-2019, in one of which she was the principal researcher, and in another she was the supervisor. She is a member of prestigious scientific organizations in Bulgaria: the Bulgarian Association of Microbiologists and the Bulgarian Society of Medical Virology.

## **RESEARCH ACTIVITY**

### **Scientific production**

The submitted documentation of Dr. Zhivka Stoykova is in accordance with the requirements for conducting a competition for AP "Associate Professor". To participate in this competition, she submitted a total of 26 scientific works, which are distributed as follows:

1. Publications equivalent to a monographic work – 10 articles
2. Publications in scientific journals, referenced and indexed in world-famous databases with scientific information - 15 articles
3. Published book chapter - 1
4. Participation in national and international scientific forums - 28

The scientific research activity of Dr. Zh. Stoykova is presented in 6 main aspects, all directly related to current problems of clinical virology, with the emphasis on herpes infections and in particular in risk patient groups. Significant contributions have been made in all directions, and I would like to highlight the most important of them:

1. Latent viral infections (CMV, EBV, BKV) in patients with oncohematological diseases and immunocompromised (transplanted) patients were thoroughly studied with modern methods, as a result of which the RT-PCR method was introduced and already established in laboratory practice as a method of choice to detect reactivation of these infections in the course of patient monitoring.
2. The epidemiology of SARS-CoV-2 infection and some aspects of its laboratory diagnostics in the context of the COVID-19 pandemic were studied. The dynamics of COVID-19 were analyzed in a large-scale hospital-based study for the first two years of the pandemic.
3. The possibilities of various additional laboratory methods such as avidity tests, immunoblot and RT-PCR to aid in diagnosis the herpes virus associated infections have been evaluated.
4. Various aspects of infections associated with hepatotropic viruses have been studied:
  - Post-vaccination immunity against HBV in a large cohort of healthcare workers was studied.
  - Therapeutic responses during antiviral therapy in patients with chronic HBV / HDV hepatitis were assessed.
  - an in-depth analysis of occult hepatitis B in patients with liver dysfunction was performed.
  - The frequency of HBsAg and anti-HCV positivity in patients with non-Hodgkin's lymphomas were found to be higher than the average for the region and the country.

- The dominant variant in the epidemiological pattern of HCV genotypes in patients with chronic liver diseases in Northeastern Bulgaria was identified.

5. Large-scale sero-epidemiological studies were carried out on the spread of CMV and EBV infection among the population in the region of northeastern Bulgaria for a long period, both for the general population and for different risk groups - pregnant women and women in reproductive age and newborn children. The estimated population risk of in utero transmission of CMV was established, the influence of age and gender on the onset of primary EBV infection was defined. The current seroprevalence of these two chronic viral infections is characterized in detail and the dynamics compared to previous studies is analyzed.

In the presented scientific production, Dr. Zh. Stoykova is the first or only author in 5 of the publications, second author in 3, third - in 6 and subsequent author in 12 of them, i.e. her leading role and contribution are in above 50%. The total IF of the scientific production is 14,609. The author's individual h-index is 5 (Google Scholar). Dr. Stoykova's scientific works have been cited a total of 65 times, of which 25 were cited in scientific journals, referenced and indexed in world databases with scientific information.

### **EDUCATIONAL - TEACHING ACTIVITY**

Dr. Zivka Stoykova is a respected university professor with over 15 years of teaching experience. Her total classroom employment for the last 5 academic years is 1472 hours, of which 1362 are hours in the English language program. She actively participates in the development and conduct of seminars and lectures for students from the specialties Medicine BLE and ELE, Dental Medicine BLE and ELE and Pharmacy.

### **CONCLUSION**

Dr. Zivka Stoykova is a highly qualified specialist with excellent expertise in the field of clinical virology and many years of teaching experience. I know her as a responsible professional, extremely precise in her work and in teaching students. The scientific metrics, the contributions of her scientific production and her teaching activities are fully in line with and exceed the minimum national requirements of the Law of Development of the Academic Staff and the minimum requirements of MU-Varna for occupying the academic position "Associate Professor". Based on all this, as a member of the Scientific Jury, I strongly support her candidacy and recommend to the Scientific Jury to elect Dr. Zhivka Stoykova Demireva-Kalcheva as an associate professor in the scientific specialty "Virology" for the needs of the Department of Microbiology and Virology at the Medical University - Varna.

Signature:



27.04.2023

/prof. Temenuga Stoeva, MD, PhD./