

To the honorable members of the Scientific Jury
Designated by Order No. I-45/26.03.2025 of
the Director of The Stephan Angeloff Institute of
Microbiology at the Bulgarian Academy of Sciences

Statement of Opinion

by **Assoc. Prof. Lubomira Nikolaeva-Glomb, MD, PhD**

in the scientific specialty of Virology in professional field 4.3. Biological Sciences,
Associate Professor of Virology in professional field 7.1. Medicine in the period 2014-2024 at
the National Center for Infectious and Parasitic Diseases and Associate Professor of Virology
in professional field 4.3. Biological Sciences in the period 2011-2014 at the Stephan Angeloff
Institute of Microbiology at the Bulgarian Academy of Sciences

regarding the materials submitted for participation in the competition for the academic
position of Associate Professor in the scientific specialty of Virology, professional field 4.3.
Biological Sciences, for the needs of the Department of Virology at the Stephan Angeloff
Institute of Microbiology at the Bulgarian Academy of Sciences

In the competition for the academic position of Associate Professor in the scientific specialty
of Virology, announced in State Gazette, issue no. 11/07.02.2025, there is one candidate,
namely: Lora Simeonova Simeonova, Chief Assistant at the Department of Virology of the
Stephan Angeloff Institute of Microbiology at the Bulgarian Academy of Sciences.

I declare that I have no conflict of interest within the meaning of Article 4, paragraph 3 of the
Law on the Development of the Academic Staff in the Republic of Bulgaria. I declare no co-
authorship with Lora Simeonova.

1. Materials for Review.

The submitted set of materials for participation in the competition corresponds to the
requirements of the Law, its Implementing Regulations, and the Regulations at the Stephan
Angeloff Institute of Microbiology at the Bulgarian Academy of Sciences.

2. Biographical Data and Career Development.

Lora Simeonova is a BSc in Molecular Biology and a MSc in Virology from Sofia University
"St. Kliment Ohridski" since 2005. She is a PhD in Virology since 2011. Her PhD thesis
dissertation was developed at the Stephan Angeloff Institute of Microbiology at the Bulgarian
Academy of Sciences under the scientific supervision of Acad. Angel S. Galabov, DSc. The

topic of her PhD Thesis deals with the combined antiviral effects of rimantadine and oseltamivir against influenza virus replication *in vitro* and *in vivo*.

Since 2005 till now, Lora Simeonova has successively been a specialist, assistant, and a chief assistant at the Stephan Angeloff Institute of Microbiology.

Lora Simeonova demonstrates stable upward career development.

3. Scientometric Analysis

In the current competition, Lora Simeonova presents 20 scientific papers, that are published after she obtained her PhD degree. In three of them, she is the first author, and in two - the corresponding author. Nine of the presented articles are cited in Q1. According to the quartile Lora Simeonova collects 338 points. The required minimum is 320. The total impact factor for the presented papers is 45.1, and the required minimum at the Stephan Angeloff Institute of Microbiology is 20.

According to the candidate's statement retrieved from *Scopus*, her scientific publications are cited 149 times. According to a reference made by me in *Scopus* on May 31st, 2025, the publications of Lora Simeonova for her overall scientific career are referred 160 times in 152 papers and she achieved an individual h-index of 7. Her profile in *Google Scholar* retrieves 31 publications of hers, referred 254 times. Citations found after 2020: 155. Her *Google Scholar* h-index is 9. Her profile in *ResearchGate* retrieves 222 citations and an individual h-index of 9. The minimum h-index required by the Regulations of the Institute is 5.

Lora Simeonova participated in 5 research projects, financed by the National Fund for Scientific Research. In one of the projects, she is the leader. She declares participation in still another five projects, financed by other sources.

The scientometric indicators for Lora Simeonova, along with those found in the databases listed above, reveal a well-established publication activity, which is assessed and appreciated by the international scientific community. Lora Simeonova fully meets the minimum national requirements, and even exceeds the values for scientific indicators necessary to hold the academic position of "associate professor" at the Stephan Angeloff Institute of microbiology at the Bulgarian Academy of Sciences.

4. Research activity, scientific contribution and main scientific trends.

Lora Simeonova presents a brief overview of her research activities to date, as well as her vision for future research. She also presents a report on her original scientific contributions. From these documents, as well as from the articles submitted for participation in the

competition, it is evident that Lora Simeonova's scientific interests are focused primarily on the search for and the characterization of the antiviral activity *in vitro* and *in vivo* of virus replication inhibitors. She manifests a long-lasting and constantly deepening interest in the combined use of antiviral drugs. Two of her scientific papers with quartile Q1 are dedicated to the combined use of the neuraminidase inhibitor oseltamivir, the M2 blocker rimantidine and vitamin E as an antioxidant. Lora Simeonova proves that the combination of selective inhibitors of influenza virus replication with different mechanisms of action, as well as the combination of a viral inhibitor with an immune response modulator and an antioxidant, is a winning strategy for the therapy of influenza infection. In addition to these searches, Lora Simeonova investigates promising new substances with antiviral, virucidal, antioxidant and immunomodulatory effects of natural and synthetic origin, expanding the spectrum of model viruses with which she works. In addition to her interest in influenza viruses, seasonal coronaviruses, human papillomaviruses, enteroviruses, herpesviruses, fish viruses causing serious economic losses in major aquaculture, come. Her third article with quartile Q1 reveals the broad-spectrum antiviral and virucidal effect of lactic acid bacteria products against the phylogenetically distant human herpesvirus 1 and Koi herpesvirus in carp fish. The remaining two articles with quartile Q1 outline a completely new type of research in the field of combined antiviral chemotherapy - optimization of the biological effects by inclusion in nanostructures as drug carriers. The main chemotherapeutic parameters for the cytotoxicity, antiviral and virucidal activity of silver nanoparticles, applied alone or in the form of conjugates with chlorhexidine, are determined.

Lora Simeonova is also focusing more deeply on studying the pathogenesis of viral infections, the influence of oxidative stress, and the study of the antioxidant properties of compounds of natural and synthetic origin.

Lora Simeonova demonstrates enduring interest in modern scientific areas and contributes to the enrichment and dissemination of scientific achievements.

5. Teaching and learning activities.

For several years, Lora Simeonova has been actively involved in the educational activities of Sofia University "St. Kliment Ohridski" by giving lectures and conducting practical exercises in the discipline of Microbiology and Virology in the specialty of Pharmacy at the Faculty of Chemistry and Pharmacy. She was the scientific supervisor of two diploma theses – one for a bachelor's degree and the other – for a master's degree at the New Bulgarian University.

6. Compliance with the requirements of the Law, the Regulations for its implementation and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions at the Stephan Angeloff Institute of Microbiology at the Bulgarian Academy of Sciences.

Lora Simeonova fully meets the requirements of the Law and the regulations for its implementation.

Conclusion

The documents submitted for review contain original scientific and applied scientific contributions. The scientific publications have received recognition in this country and abroad, as evidenced by the number of citations. There is also teaching activity. The candidate meets the minimum national requirements, as well as the additional quantitative criteria adopted at the Stephan Angeloff Institute of Microbiology at the Bulgarian Academy of Sciences, for holding the academic position “Associate Professor” in the scientific specialty of Virology in the direction 4.3. Biological Sciences.

I confidently declare my positive assessment and recommend to the Scientific Jury to prepare a motivated proposal for the election of Lora Simeonova Simeonova to hold the academic position “Associate Professor” in the scientific specialty of Virology for the needs of the Laboratory for Experimental Chemotherapy of Influenza at the Department of Virology at the Stephan Angeloff Institute of Microbiology of the Bulgarian Academy of Sciences.

Sofia, June 4th, 20205

Opinion prepared by:

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