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To the Chairman of the Scientific Jury, Appointed by Order No. 251/12.06.2023 of the Director of the NCIPD, Sofia

Statement

By Prof. Dr. Mariyana Stoycheva Vartigova, PhD, DSc MU Plovdiv, Scientific specialty "Infectious diseases" External member of the Scientific Jury

Regarding: Competition for the academic position of "ASSOCIATED PROFESSOR", announced in the State Gazette no 54/23.06. 2023, p.43, for the needs of the Department of Immunology of the National Center of Infectious and Parasitic Diseases, in the field of higher education 4. "Natural sciences, mathematics and informatics" in professional direction 4.3 Biological sciences, in the scientific specialty "Immunology" (06.01.23).

The only candidate in the competition is chief assistant Radoslava Emilova Grozdanova, PhD, National Reference Laboratory of Immunology (NRLI), NCIPD, Sofia

I declare that I have no conflict of interest with the participant.

The submitted documents and materials for the competition, from chair assistant Radoslava Emilova Grozdanova, bd, are in full compliance with the requirements of the Law on Development of Academic Staff in the R Bulgaria, the Rules for its implementation and the Rules of the NCIPD. I would like to note that the documents are very correctly and precisely presented, which facilitates their evaluation and analysis.

Analysis of the candidate's career development.

Chief assistant Radoslava Emilova Grozdanova, PhD, is a graduate of the Faculty of Biology, Sofia University "St Kliment Ohridski". She has a master's degree in biology, after an academic course in 1997-2003 and defended her diploma thesis on the topic "Method for the purification of C-phycocyanin from Spirulina fusiformis". In the period 2010-2014, she was a full-time doctoral student in the department "Animal and Human Physiology" at the Faculty of Biology, Saint Kliment Ohridski University, Sofia. R Emiova gained the Educational and scientific degree DOCTOR (Ph D) in October 2014, after successful defense of dissertation work "Role of mediators of perivascular adipose tissue for arterial contraction".

She worked successively in (1) Clinical Laboratory of St. Magdalena Medical Center - Pernik (2003 - 2004); (2) SHATCD-EAD "Professor Ivan Mitev", Sofia, as a biologist in National screening programs and functional endocrine diagnostics (2005 - 2013); (3) SHATCD -EAD "Professor Ivan Mitev", Sofia, in the Cytogenetic Laboratory (2011 - 2023). Since 2016 and is currently the chief assistant at NRLI, NCIPD, Sofia

Radoslava Emilova has 15 **additional courses and trainings**, which testify to her persistent pursuit of self-improvement and dedication to scientific work. Some of them are: 2023 "Human Population and Evolutionary Genetics", Institut Pasteur, MOOC: Massive Open Online Course; 2023-"Modeling of Infectious Diseases", Institut Pasteur, MOOC: Massive Open Online Course; 2021-"Viral phylogeny and molecular-epidemiological methods for surveillance and control of viral diseases" – NCIPD; 2018 - "HIV Science", Institut Pasteur, MOOC: Massive

Open Online Course and others 2018 - "Tuberculosis", Institut Pasteur, MOOC: Massive Open Online Course.

Publication activity and citations.

In the competition, the candidate presented a total of 52 scientific papers. Of these, seven are before the defense of a doctoral dissertation, three are in connection with the dissertation defense and 42 are after obtaining the scientific degree "doctor".

The articles indexed in SCOPUS are 31 in number, with a total IF of 34,775, and after acquiring the ONS, the calculated IF is 31,688 (Appendix #14 of the documentation, Author's Impact Factor Reference). There are four journal publications with SJR Q1, six journal publications with SJR Q2, three with Q3, and sixteen journal publications with SJR Q4. He is also a coauthor in two book chapters.

She is the co-author of 17 articles in Bulgarian and international journals not indexed in SCOPUS and two articles in proceedings of national scientific forums.

The active participation of chief assistant R. Emilova is confirmed by the fact that in 44% of the mentioned publications she is the first author (7 articles), in 4 articles she is the second author and last in 12.

Chair assistant professor R. Emilova shows extremely high scientific activity by presenting reports or posters in 173 scientific forums, of which 63 are international and 110 national. There are 34 abstracts published in journals with an impact factor (23 were published in Q1 journals, 6 in Q2 and 5 in Q3 journals).

The high publication activity is confirmed by 164 citations in Scopus on the scientific works, with 74 citations from the last five years. The author has a Hirsch index (h) of 5. This is proof of the interest of the international scientific community in the developed problems and the achieved results.

Participation in scientific projects.

Substantial representation for chair assistant R. Emilova is participation in project activities. A total of 18 projects are presented (one of which is international), and R. Emilova is the head of one of them and the lead researcher of some of the work packages in other.

With the required 400 points for the academic position of ASSISTANT PROFESSOR, the candidate presents a total of 1041 points.

Main scientific directions and contributions.

The main directions in the research activity of chair assistant R. Emilova are in the field of infectious immunology; iron homeostasis in normal and in various pathological conditions; oxidative stress and intercellular signaling, and allergology.

Contributions. In the period 2005-2015 Radoslava Emilova has made a significant contribution to mass neonatal screening programs for congenital hypothyroidism and congenital adrenal hyperplasia of newborns in Bulgaria, as well as in the development and implementation of methods for the determination of various hormones and for the optimization of functional endocrine diagnostics.

Contributions after the doctoral dissertation can be summarized as follows:

- 1. Contributions in the field of infectious immunology:
- 1.1. Contribution to HIV infection studies: active participation in studies on the diversity of HIV-1 subtypes and recombinant forms in the Republic of Bulgaria; immunological indicators as prognostic markers of immune recovery in HIV+ on long-term antiretroviral therapy.

1.2. Contribution to studies of SARS-COV-2 infection

Substantial contribution of the candidate to the investigation of the immune response upon exposure to SARS-COV-2 (infection/vaccination). Discovery of immunological parameters useful for monitoring the clinical course of Covid-19, predictors of severity as well as markers for efficient protection.

1.3. Contribution to the study of Mycobacterium tuberculosis infection

Investigation of the cellular response against Mycobacterium tuberculosis in active and latent tuberculosis (flow cytometry, extended immunophenotypic panel).

Determination of the cytokine spectrum, pro/anti-inflammatory eicosanoids, PGE2/LXA4 during the different stages of MTB infection.

- 2. Contributions to studies of iron homeostasis in normal and various pathological conditions: HIV infection, beta thalassemia, sleep apnea and chronic renal failure.
- 3. I agree with the contributions noted by the author in the field of oxidative stress and allergology
- 4. I especially want to note the *Applied contributions*, of exceptional importance for clinical practice: the introduction of non-invasive and sparing methods in various pathological conditions. Development of methods for the determination of cortisol and immunoglobulins in saliva, antimicrobial peptides in feces, determination of anti-CCP and RF in crevicular fluid in patients with rheumatoid arthritis (RA) and periodontitis.

Teaching and learning activity.

Ch. assistant R. Emilova under a civil contract with the University "Prof. Dr. Asen Zlatarov, Burgas, had 70 hours of classroom work in 2022, conducting exercises in Medical Genetics. In addition, she actively participated in the educational and teaching activities of the Department of Immunology in the courses for postgraduate training, consulting, methodical and experimental-organizational activities of the enrolled specialists, graduates with lectures, exercises and seminars, in accordance with the program of the National Institute of Health Sciences.

Participation in national and international scientific organizations.

Ch. assistant R. Emilova, db is a member of: Bulgarian Society of Immunology, EACS (European AIDS Clinical Society)

Conclusion

Chief assistant Radoslava Emilova Grozdanova, bd is a proven scientist in the field of immunology. Her knowledge and practical experience in the field of infectious immunology will be of essential importance for the development of modern diagnostic approaches in the Department of Immunology of the National Medical Center Sofia.

Given the publication activity, the significant contributions, the citations of the scientific developments in prestigious international publications, the active participation in scientific research projects and the commitment to educational and teaching activities, I can confidently state that they fully satisfy the quantitative and qualitative requirements of the Law on Development of Academic Staff in the R Bulgaria, the Rules for its implementation and the Rules of the NCIPD for occupying the academic position of ASSISTANT PROFESSOR.

Based on all this, I give my positive vote, and recommend to the respected members of the scientific jury to choose Assistant professor Radoslava Emilova Grozdanova of the academic

position of "Associate professor" in the scientific specialty "Immunology", for the needs of the Department of Immunology, NCIPD - Sofia.

Prof Mariyana Stoycheva MD, PhD, DSc

03.10.2023y

