



OPINION

Regarding the research and teaching activities

Of assistant professor Radoslava Emilova Grozdanova, Ph.D., in connection with her participation in a competition for the academic position "Associate Professor" for the needs of the Department of Immunology and Allergology of the National Center of Infectious and Parasitic Diseases, in the professional field of Biological Sciences 4.3.

By Academician Dr. Bogdan Petrunov

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In the announced in no. 54/23 of the State Gazette competition for the academic position "Docent" for the needs of the Department of Immunology at the NCIPD, only one candidate appeared - Assistant Professor Radoslava Emilova Grozdanova, Ph.D. from the same department. To participate in the competition, the candidate submitted one dissertation on DB, 31 publications in foreign journals with a certain quartile, 18 publications in our and international journals without a certain quartile, two chapters in a monograph, 63 presentations or posters in international scientific meetings and 110 participations in national. This speaks of the significant efforts of the candidate to make her research results available to the international and national scientific communities. All of Grozdanova's scientific work is in collaboration with other specialists, and in more than 40% of the published articles she is the first author in a collective, which shows her significant role in the realization of the research work. A strong impression is made by the obtained impact factor - 34.75 of the 31 published articles in international or our scientific journals with a certain quartile. The significance of Grozdanova's studies and the publication of the obtained results is confirmed by the high number of their well-documented citations – 164, of which 74 are from the last 5 years, which clearly shows their relevance. I especially want to note the candidate's activity with participation in 18 scientific projects financed by the "Scientific Research" Fund, Sofia University and Sofia University. which shows her taste in solving various scientific and practical issues. In 2014, he successfully defended his doctoral dissertation on the topic "The role of mediators of perivascular adipose tissue on aortic contraction".

The analysis of Grozdanova's scientific-research and scientific-applied activity shows that she has broad interests in the field of immunology and allergology, which are based on her very

good theoretical and methodical-laboratory training, allowing her to realize many interesting research projects of significant scientific value. Grozdanova's drive for the practical implementation of her results with the development or optimization of various laboratory/immunological methods makes a strong impression. The main contributions of the candidate's research work could, in my opinion, be summarized as follows.

1. The data in the study of iron homeostasis in various pathological conditions are interesting; the importance of serum hepcidin in patients with beta-Thalassemia and participation in the introduction of a method for its determination; the introduction of a method for determining erythroferon in serum.

2. Very important from a theoretical and practical point of view are the extensive studies on the humoral and cellular immune response in Covid-19 comparing immunized and recovered persons in a team under the leadership of Prof. Mari Nikolova. Original results are reported on the relationship between IgG and IgA antibody levels and viral load; for the severity of the disease in relation to the nature of cytokine secretion through the Luminex system, allowing the detection and analysis of 25 cytokines; confirming the importance of virus-specific memory T-lymphocytes for immune protection against infection. The studies on the nature of cellular immunity in healthcare workers in our country are original and of international interest. All this allows to obtain a sufficiently justified picture of the nature of the immune response to the Covid-19 infection in the Bulgarian population during the course of the pandemic.

3. The studies on HIV infection, with the determination of double negative /CD4-CD8- / and double positive / CD4+CD8+ / T cells as an important prognostic marker in the immune recovery of HIV+ patients subjected to anti-HIV, are definitely of a contributing nature. therapy; the studies on the cellular immune response of HIV+ people with co-infection with corona virus are very interesting and up-to-date;

4. Research on cellular immunity and cytokine production in patients with latent and active tuberculosis is of significant interest within the framework of the National Program to Fight Tuberculosis.

5. Studies in the field of allergology with the determination of T-regulatory lymphocytes and their subpopulations in patients with respiratory allergy with a view to evaluating the clinical effect of the performed allergen-specific immunotherapy, in parallel with determining the ratio of specific IgE and IgG4 antibodies as marker in this regard.

6. Special mention should be made of Grozdanova's contribution to mass screening programs for the search for congenital hypothyroidism and adrenal hyperplasia with the development and implementation of various methods in endocrine diagnostics.

7. Interesting and original for our country are the data from the studies of oxidative stress with the development of a method for its determination in plasma and cell lysate and especially in CD4 and CD8 subpopulations in HIV+ persons undergoing long-term anti-retroviral therapy.

The candidate also has a well-established teaching activity, as can be seen from the submitted documents. She skillfully shares her rich theoretical and practical experience regarding the student body, the preparation of magistrates, specialists and doctoral students.

Assistant Professor Radoslava Grozdanova was born in 1978 in Pernik. He graduated with a bachelor's degree and a master's degree in biology at the Faculty of Biology of the Sofia University. He started working as a biologist in the Clinical Laboratory of the Children's Hospital in Pernik in 2003, and from 2005 he started working in the Cytological Laboratory at the University Children's Hospital in Sofia until 2016, after which he worked in the Central Immunological Laboratory at the NCIPD, where it is until now. He is fluent in written and spoken English and Russian languages. Has high computer literacy. She has taken many different specialization and advanced courses which have helped her grow as an established immunologist. In connection with the national requirements for "Docent" candidates to have a minimum of 400 points, Grozdanova significantly exceeds this limit - her research and teaching activity collects 1021 points.

In conclusion, based on the presented rich information about the results of the candidate's scientific research and applied activity, her active teaching activity and my personal impression of my professional contacts with her, I allow myself to determine Assistant Professor Radoslava Emilova Grozdanova as a fully formed young scientist-immunologist, with a broad immunological culture, with extensive practical experience and mastery of a wide range of laboratory-research and diagnostic methods, capable of generating research ideas and leading teams for their implementation. All this gives me full reason to recommend to the respected scientific jury to choose Assistant Professor Radoslava Emilova Grozdanova, Ph.D. of the academic position "Associate Professor" in the scientific specialty "Immunology", scientific direction Biological Sciences 4.3., which she fully deserves, for which I give my vote with conviction.

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