

STATEMENT

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Subject: competition for the academic position of "PROFESSOR" in "Biochemistry", for the needs of the "Biochemistry, Molecular Medicine and Nutrigenomics" Department, Faculty of "Pharmacy" at Medical University Prof. D-r P. Stoyanov" - Varna

1. Information about the Competition

Based on the order No. P-109-96 of 21.03.2024 of the Rector of the Medical University - Varna, I have been elected as a member of The Scientific Jury, and by Protocol No. 1 of the first meeting of the SJ, I have been appointed to prepare an opinion in connection with the procedure for the academic position "PROFESSOR" in the scientific specialty "**Biochemistry**", area of higher education **4. Natural sciences, mathematics and informatics**, professional direction **4.3. Biological sciences** according to a competition announced in State Gazette No 07/January 23, 2024, for the needs of the Department of "Biochemistry, Molecular Medicine and Nutrigenomics", Faculty of "Pharmacy" at Medical University Prof. D-r P. Stoyanov" – Varna, with the only candidate in the competition Maria Atanasova Radanova, associate professor in the same department. The review of the documents shows that they have been prepared precisely and fully meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Rules for its Application.

2. Meeting the Criteria for Assuming the Academic Position

To participate in the competition for the academic position "Professor" in the scientific specialty "Biochemistry", Dr. Maria Radanova has submitted 1 dissertation for the award of the "Doctor" degree, 5 full-text scientific publications referenced and indexed in scientific databases (Web of Science and/or Scopus), which are equivalent to a monographic (habilitation) work (indicator B4), 9 scientific publications from indicator Г7 and two book chapters referenced in Scopus (indicator Г8), which fully reflect the scientific research activity of the candidate. The total IF of the submitted publications, excluding the IF values of the publications related to the thesis for the award of the "Doctor" degree, is **44.89**. The total number of points based on the quartile (Q) values of the journals in which the works were published is 210. Most of the publications from the three indicators are from the last 5 years. In 12 of the publications (75%), the candidate is **either the first or the last author**, which demonstrates her active and leading role in their development and publication. Beyond the required scientometric requirements, the candidate is participating in the competition with two additional publications in journals referenced and indexed in Web of Science and/or Scopus (35 points) and presents data on her participation in 11 scientific forums abroad and 3 in Bulgaria.

The materials Assoc. Prof. Radanova has submitted for the competition are within the scientific field of the announced competition.

The candidate's citation index (h-index) is 10, according to SCOPUS (<https://www.scopus.com/authid/detail.uri?authorId=23499446600>) and Web of Science (<https://www.webofscience.com/wos/author/record/528759,3854939,26767230>), and 13 according to Google Scholar (<https://scholar.google.com/citations?user=UzXPPM0AAAAJ&hl=en&oi=ao>).

The provided references indicate that at the time of document submission, there were 119 citations of the candidate's scientific work by independent research groups, which adds 238 points from indicator Д11.

Assoc. Prof. Radanova's scientific developments characterize her as a well-established scientist with international visibility and a scientific profile, which aligns with the thematic priorities of the department at the University of Medicine - Varna, where she is advancing her career. She participated in 4 national research projects of the department, which earned her 40 points from the E14 indicator, she is the leader of 3 national scientific projects (E16 = 60 points), the Bulgarian team of one international project (E17 = 50 points) and in total the acquired funds from project activities amount to BGN 176,928, a total of 34 points from indicator E18. Assoc. Prof. Radanova is the scientific supervisor of three successfully defended doctoral students (a total of 150 points from indicator E13 - according to the Regulations of the academic staff development at MU-Varna, the number of points for co-supervision of the doctoral student is not reduced if both scientists are from different scientific fields, as is the case presented). The candidate maintains scientific profiles on ORCID, Scopus, Web of Science, ResearchGate, and Google Scholar. She is a member of the Union of Scientists in Bulgaria (Biochemistry, Biophysics, and Molecular Biology section), the Union of Scientists - Varna, Bulgaria, and the Association of Biochemistry Departments in Bulgaria. She participated in numerous specializations and additional professional qualifications, such as in 2023, when she joined 4 face-to-face and online international courses.

I accept her scientific contributions grouped by main directions as follows:

I. Diagnostic, prognostic, and predictive biomarkers in solid tumors.

1. Non-coding RNAs (ncRNAs) and single nucleotide polymorphisms (SNPs) in their genes as diagnostic and prognostic biomarkers;

2. Protein and genetic biomarkers with prognostic and predictive significance;

II. Molecular effects of inhibition of C1q – the first component of the complement system – in patients with autoimmune diseases;

III. Pathological dysregulation of metabolism.

An essential part of Assoc. Prof. Radanova's scientific works, with which she participated in the competition for a professorship, is aimed at studying the levels of circRNAs and miRNAs circulating in the blood, as well as tracking the role of SNPs in miRNA genes, as potential biomarkers in patients with colorectal carcinoma compared to healthy controls. These studies were carried out by interdisciplinary teams under her leadership within two research projects and one doctoral dissertation, and the scientific contributions were reflected in 5 publications equivalent to a habilitation thesis. To gain a deeper understanding of the mechanisms by which ncRNAs perform their functions, the possibility of using them as an independent biomarker or in combination with established ones in routine practice, as well as in connection with the development of targeted therapies, the scientific work of Assoc. Prof. Radanova is aimed at conducting follow-up functional analyses. Another part of the research in collaboration with large teams of medical oncologists, pathologists, geneticists, and other specialists is related to the search, analysis, and evaluation of

biomarkers relevant to the prognosis and response to therapy in patients with colorectal cancer, non-small cell lung cancer, and metastatic breast carcinoma, as well as a study of the autoimmune response against plasma proteins of the innate immune system. International collaborations, project activity, and the management of doctoral students form the image of an initiative and advanced scientist with a high contribution to the research work of the department to which she belongs. The results are presented in several subsequent publications in scientific journals with a high rating and the leading role of Assoc. Prof. Radanova is evident.

The balance for the fulfillment of the minimum national and additional requirements for the scientific and teaching activity of the candidate for the academic position "Professor" in the scientific field and professional direction of the competition according to indicators is as follows:

<i>Indicator Group</i>	<i>Content</i>	<i>Professor</i>	<i>Completed</i>
A	Indicator 1	50	50
Б	Indicator 2	-	-
В	Indicators 3 and 4	100	102 (from B4)
Г	Indicators from 5 to 10	200	210
Д	Indicator 11	100	238
Е	Indicators from E12 to E20	150 (≥ 100 from E13)	366.98 (of which 150 from E13)
Total		600	966.98

3. Evaluation of teaching and learning activity

Assoc. Prof. Maria Radanova is an established and experienced Biochemistry and Molecular Biology teacher with over 20 years of teaching experience. With a norm of 180 hours of auditorium employment, she has an average annual classroom workload of 217 hours at the Medical University - Varna and an additional average of 68 hours at the University of Ruse "Angel Kanchev", where she gives lectures in Biochemistry and Clinical Laboratory, as well as in Biochemistry and Immunology at the Faculty of Public Health and Health Care. The candidate's teaching experience is also evidenced by her participation as a co-author in one textbook (E19=0.98 points) and two study guides in Biochemistry, which bring her 9 points to the E20 indicator.

4. Conclusion

In the competition, Assoc. Prof. Radanova presents herself with a scientific production that characterizes her as a leading scientist with her profile and development in the field of scientific priorities of the Department, for the needs of which the competition has been announced, and as an experienced teacher. The candidate's scientific contributions significantly exceed the minimum scientometric requirements for occupying the academic position of "Professor" in the scientific specialty of "Biochemistry", professional direction 4.3. Biological sciences, and field of higher education 4. Natural sciences, mathematics, and informatics. The overall analysis of the candidate's scientific output gives me the reason to give the highest rating and a positive opinion, and to propose to the members of the Scientific Jury to vote for Assoc. Dr. Maria Atanasova Radanova to acquire the academic position "Professor" in the scientific specialty "**Biochemistry**", professional direction

4.3. *Biological sciences*, in the field of higher education **4. *Natural sciences, mathematics, and informatics***.

May 21, 2024

Reviewer:

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§1, б. „В“ от Регламент (ЕС)
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/Prof. Diana Ivanova, PhD, DSc/