STATEMENT

by Assoc. Prof. Milka Asparuhova Nashar, PhD
Department of Biochemistry, Molecular Medicine and Nutrigenomics
Medical University "Prof. Dr Paraskev Stoyanov", Varna
Related to Competition for the occupation of Academic Position "**Professor**" in scientific specialty **Biochemistry**, in the area of higher education 4. Natural sciences, mathematics and informatics, professional field 4.3. Biological sciences

1. Information about the competition procedure

The competition was announced in State Gazette No. 59/26.07.2022 for the needs of the Department "Biochemistry, Molecular Medicine and Nutrigenomics", Faculty of Pharmacy of the Medical University "Prof. Dr. Paraskev Stoyanov", Varna. I am a member of the Scientific Jury according the Order of the Rector of the Medical University - Varna (No. P-109-359/21.09.2022) and the decision of the Faculty Council (Protocol No. 41/19.09.2022). Only one applicant participates in the competition: Assoc. Prof. Yoana Kiselova-Kaneva, PhD.

All documents submitted by the applicant are correctly arranged and are in compliance with the regulative requirements for participation in the competition for occupation the Academic Position "Professor" in Medical University – Varna.

2. Education and career development

Assoc. Prof. Kiselova-Kaneva has started her scientific career in te Institute of Genetics - BAS, immediately after graduating from the Master's in Biology at Plovdiv University "P. Hilendarski". In 2004 she was enrolled as a full-time doctoral student in the scientific specialty "Biochemistry" and in 2006 she was appointed as an assistant in the Department of Biochemistry, Molecular Medicine and Nutrigenomics, where Kiselova developed her academic career. In 2011 Yoana Kiselova-Kaneva has successfully defended her dissertation for obtaining educational and scientific degree "Doctor " in biochemistry, and since 2013 she has been an Associate Professor in the same scientific specialty. Kiselova has a recognized specialty in biochemistry from the Postgraduate Training in the Health Care System. In 2016, Associate Professor Kiselova-Kaneva was elected Head of the Department of Biochemistry, Molecular Medicine and Nutrigenomics and has held this position for two consecutive terms. Since 2017, Yoana Kiselova has been entrusted with the management of the "Nutrition and Quality of Life" Department at the Research Institute of the Medical University - Varna, as well as the management of a separate scientific group "Nutrigenomics and Personalized Nutrition" in the same department. This idicates her commitment and contribution to the scientific priorities of the university where she works and develops her career.

3. Educational and teaching activities

According to the attached reference, the average teaching load per year of Assoc. Kiselova-Kaneva for the last 4 years was 155 academic hours, at the norm of 126, determined by the Academic Council for a Head of Department. She was the main lecturer of the compulsory lecture course in biochemistry for students in "Dental Medicine" (including English language programme) and in the course "Biochemistry and Pathobiochemistry" for students in "Medical Laboratory Assistant" from the Medical College. Kiselova has been engaged with separate lecture modules for the specialty " Transfer of Technologies and Innovations in

Pharmacy" and in several elective disciplines for medical and pharmacy students. Kiselova-Kaneva leads seminars in biochemistry in Bulgarian and English Programme in the training course of all specialties. She is a co-author of several handbooks for seminars and practical exercises and participates in the development of exam Blackboiard tests.

4. Scientific and research activities

4.1. Fulfillment of the minimal national requirements (MNR) for holding the Academic Position "Professor"

For participation in the competition, Associate Professor Kiselova-Kaneva has submitted an Academic Reference of her scientific works and scientific activities, distributed by indicators as follows: author's abstract of the PhD thesis (**50** points in indicator **A**/A), 6 publications equivalent to habilitation work in indicator **C**/B (**101** points with a required minimum of 100 points); 20 publications in group of indicators **D**/Г, respecting the requirement that at least 80 p. are from indicator D7 (18 publications contributed for 287 points respectively) and two book chapters in indicator D8 (Total **317** points in this group of indicators, with a required minimum 200); the activities that contributed to the points in group indicators **F**/E are as follows: supervising of two doctoral students, participation in successfully completed scientific projects - 9 national (Kiselova was a Project leader of 2 of them) 1 international project, attracted funds from projects and co-authorship of 4 students' handbooks (total **267,83** points from group indicators F, with a required minimum of 150 points).

According to the presented reference, the applicant's scientific works have been cited 86 times in publications indexed by Web of Science and Scopus (**172** points from indicator **E**/Д with a required minimum of 100 points). The comparison of MNR for AP "Professor" with the data presented in the Academic Reference reveals that Assoc. Prof. Kiselova not only meets, but also exceeds these requirements (Table 1).

Table 1. Summarized scientometric indicators of the applicant, compared with MNR for occupation of AP "Professor":

Group of indicators	MNR	Applicant reference
A	50	50
C	100	101
D	200	317
E	100	172
F	150	267,83
Total for AP "Professor"	600	907,83

The total Impact Factor of the publications submitted by Yoana Kiselova-Kaneva for participation in the competition is 45,838.

4.2. Scientific contributions

The scientific works published by Assoc. Prof. Yoana Kiselova-Keneva have significant fundamental and applied contribution in three main areas:

1) *Biological activity, composition, metabolism and safety of natural raw materials, food additives and synthetic molecules (a total of 13 of the scientific works refer to this area: C4.1, C4.2, C4.3, C4.4, C4.5 , C4.6, D7.1, D7.2, D7.3, D7.7, D7.8, D7.9, D7.10, D8.1 and D8.2);*

A large amount of the scientific works of Yoana Kiselova is devoted to the phytochemical characterization and biological activity of Dwarf elderberry fruits extracts with significant fundamental and applied contribution. A detailed phytochemical characteristics of the fruits extracts was made. Moreover, new compounds have been identified in the extracts for the first time. An important result was the established resveratrol in the investigated extracts, in significantly higher concentrations compared to its content in the the grape peels. Based on our knowledge about the health benefits of resveratrol, these results are of interest in terms of using the elderberry fruits as a source of resveratrol-rich extracts and food supplements. Results with important contribution are also the new data obtained on the biological activity of the elderberry fruits in support of its use in folk medicine. The potential of fruits extracts of the plant to affect the expression of selected genes with a role in the immunomodulatory effect of these extracts and their potential to prevent cell death, oxidative stress and control inflammatory processes has been established.

2) *Study of molecular markers for new diagnostic and prognostic approaches (total 10 scientific papers*: D7.4, D7.5, D7.6, D7.11, D7.12, D7.13, D7,14, D7.15, D7.16, D7.17);

Investigations in this area contributed to establishing the applicability of certain molecular indicators in plasma, urine and saliva as diagnostic and prognostic markers in cardiovascular diseases and obesity, as well as in children with pyelonephritis and gingivitis. The results obtained in intervention studies with calory restriction in overweight individuals significantly contributed for elucidation of the concept of phenotype flexibility. The change of a significant number of biomarkers in the postprandial phase was monitored, and the individual response of the subjects to standard tests, such as the oral glucose tolerance test (OGTT) was also taken into account. It has been found that the analysis of the relevant metabolic profile in a fasting blood sample may allow early identification of pre-diabetic individuals at risk of insulin resistance without the need to undergo OGTT.

3) *Development and adaptation of new preparatory and analytical methods (two of the scientific works fall into this direction: C4.3, D7.18*).

The work of the applicant in this area has a significant applied contribution. In addition to her good theoretical preparation and in-depth knowledge of the scientific problems she works on, Assoc. Prof. Kiselova also has solid methodological knowledge. Over the years, she has contributed to the development and adaptation of methods of analysis and sample preparation, as well as to the modification of research methods, with the aim of increasing the efficiency of the work and the reliability of the results

5. Personal impressions

As a scientist and colleague, Yoana Kiselova has always demonstrated strong moral principles and loyalty. She has always been highly valued and respected by her colleagues and

students due to her professionalism and dedication to the science, and also due to her personal qualities – diligence, correctness, honesty in relationships and ability to stand up for her principles. This, along with her solid scientific achievements to date, gives me a reason to believe that she possesses all the qualities to move to the next stage in her career development, occupying AP "Professor"

6. Conclusion

The documents and evidentiary material presented by Assoc. Prof. Yoana Kiselova-Keneva, PhD, meet all the regulatory requirements and exceed the criteria for acquiring AP "Professor". She is an established specialist and teacher, respected by her colleagues and students. The presented materials and my personal impressions give me the reason to express my convinced positive opinion regarding the candidature of Assoc. Prof. Yoana Kiselova-Kaneva for the Academic Position "Professor" in the scientific specialty "Biochemistry", in the area of higher education 4. Natural sciences, mathematics and informatics, professional field 4.3. Biological sciences.

05.12.2022 г.
Varna

Member of the Scientific Jury:
(Assoc. Prof. Milka Nashar)