

# OPINION

by **Prof. Dr. Balik Malomirov Dzhambazov**

**Faculty of Biology at the Paisii Hilendarski University of Plovdiv**

regarding the materials presented for participation in a competition  
for the academic position "**Professor**"  
at the **Paisii Hilendarski University of Plovdiv**

in the field of higher education **4. Natural Sciences, Mathematics and Informatics**

professional field **4.3. Biological sciences (Morphology)**

In the competition for a "Professor", announced in the State Gazette (Bulgaria), no. 92 of 18.11.2022 and on the website of the Paisii Hilendarski University of Plovdiv for the needs of the Department of Developmental Biology at the Faculty of Biology, as the only candidate participated Associate Professor Dr. Elenka Stoilova Georgieva from Paisii Hilendarski University of Plovdiv.

## **1. General presentation of the procedure and the candidate**

By order No. RD-21-331 / 15.02.2023 of the Rector of the Paisii Hilendarski University of Plovdiv (PU), I have been appointed as a member of the scientific jury of a competition for the academic position "Professor" in the PU in the field of higher education 4. Natural sciences, mathematics and informatics, professional field 4.3. Biological Sciences (Morphology), announced for the needs of the Department of Developmental Biology at the Faculty of Biology.

The set of materials presented by Associate Professor Dr. Elenka Georgieva in electronic format and the habilitation monographic work "Application of nutritional supplement PARA<sup>®</sup> in men with sub/infertility and men with varicocelelectomy" (ISBN 978-619-236-411-3) in paper format, are in accordance with Art. 77 of the Regulations for the career development of the academic staff of the Paisii Hilendarski University of Plovdiv. The candidate has presented a total of 44 scientific publications, one habilitation monographic work, part of a book and 3 textbooks for students. The lists of scientific works with which the PhD degree was acquired and the academic position "associate professor" was occupied are also presented.

According to Art. 29b of the Act on Development of the Academic Staff in the Republic of Bulgaria and Art. 60 of the Regulations on the Implementation of the Development of Academic Staff in the Republic of Bulgaria Act, scientific works are evaluated according to the criteria for the minimum national requirements. One habilitation monographic work (group "B"), 23 scientific publications from the group "G" presented for participation in the competition and 3 student textbooks were accepted for review. From the presented list, publication G7\_5 is excluded, as it is not referred in Web of Science and Scopus, and publication G7\_9, which is used to register the academic position "associate professor" in the National Centre for Information and Documentation (NACID). The remaining scientific publications outside group "G" will be taken into account when forming the final opinion.

In 17 of the presented scientific publications, included in group "G", Associate Professor Dr. Elenka Georgieva is a leading author. In terms of citations, the applicant has enough citations in Web of Science and Scopus to earn above the required 100 points.

Associate Professor Dr. Elenka Georgieva is a graduate of Paisii Hilendarski University of Plovdiv and completed her master's degree in Biology in 1991. She started working in the current department ("Developmental Biology", formerly "General Biology") in 1993 as a part-time Assistant Professor in Embryology and histology. Since 1994, she has been a full-time Assistant Professor in Embryology and histology, and moving through Senior and Chief Assistant Professor in her career, since 2010 she has been appointed as an Associate Professor in the Department of Developmental Biology. The educational and scientific degree "Doctor" (PhD) was obtained in 2004. In summary, Assoc. Prof. Georgieva has 30 years of experience as a teacher in the Department of Developmental Biology, and in parallel with teaching students, during all these years she actively developed research activities, as evidenced by the large number of scientific publications and research projects with her participation. In addition, Assoc. Prof. Georgieva has always actively participated in all events related to the Faculty of Biology.

I have known Assoc. Prof. Georgieva personally since 1996 and I consider her to be an erudite teacher, an active researcher, a correct and positive person.

## **2. General characteristics of the applicant's activity**

### ***Evaluation of the educational and pedagogical activity***

Assoc. Prof. Georgieva's rich teaching experience includes giving lectures, laboratory exercises and practicums in Embryology, Histology, Developmental Biology, Reproductive Biotechnologies in the Bachelor's and Master's programs of the Faculty of Biology, as well as in the branches of PU in the town of Smolyan and the town of Kardzhali. A report on the study commitments and workload for the last 6 years is presented.

For participation in the competition for a "Professor", Dr. Georgieva presented 3 textbooks for students (General Histology, 2022, ISBN 978-619-202-812-1, General Pathology, 2022, ISBN 978-619-202-813-8 and Manual of General Embryology, 2022, ISBN 978-619-202-816-9), and she is the sole author of all three textbooks.

Under the guidance of Dr. Georgieva, 4 doctoral dissertations and 14 diploma theses were defended in bachelor's and master's programs at the Faculty of Biology.

Associate Professor Dr. Elenka Georgieva participates in the development of the curricula for the undergraduate programs of the Faculty of Biology, as well as in the accreditation committees. She is the coordinator of the Master's Program in Reproductive Biology and she is responsible for the accredited Ph.D. program in Morphology.

Dr. Georgieva's educational and organizational activities show her professionalism and empathy for the activities of the Faculty of Biology.

### ***Evaluation of the scientific and scientific-applied activity***

In the announced competition for the academic position of "Professor", Associate Professor Dr. Elenka Georgieva participated with a monographic work (group "B") and 23 scientific articles (group "G"), published in journals that are referred in the Web of Science and Scopus, and 17 of them have an impact factor. Of the 22 scientific articles presented under G7, 5 are with Q1 ( $5 \times 25 = 125$  point), 3 are

with Q2 ( $3 \times 20 = 60$  points), 6 are with Q3 ( $6 \times 15 = 90$  points) and 8 are with Q4 ( $8 \times 12 = 96$  points). Or the total number of G7 points is 371 with a required minimum of 200 points. One scientific publication in an anniversary collection (Biological Sciences for a Better Future) was also presented as a "book chapter" (group "G8").

The main scientific contributions of the habilitation monographic work are related to a complex study of the effects of the nutritional supplement PARA<sup>®</sup> in men with infertility and varicocele. The relationship between infertility and the effect of dietary supplements on smoking in men is also being investigated.

The scientific contributions of the presented publications from group "G" can be united in two directions:

The first direction is related to elucidating the toxic effects of heavy metals and pesticides on different aquatic organisms, while evaluating these effects, looking for morphological and structural changes in different tissues or organs that could be used as biomarkers for future research and monitoring. Publications G7\_1, G7\_2, G7\_6, G7\_7, G7\_8, G7\_10, G7\_11, G7\_13, G7\_14, G7\_15, G7\_16, G7\_17, G7\_18, G7\_21, G7\_22, G7\_23 and G7\_24 refer here.

The second direction is related to the establishment and research of biomarkers characteristic of various human diseases. Articles G7\_3, G7\_4, G7\_12, G7\_19 and G7\_20 refer to this direction.

Associate Professor Dr. Elenka Georgieva has presented a list of 407 citations to her scientific publications, 352 of which are in Web of Science and Scopus. This shows the knowledge of Assoc. Prof. Georgieva's scientific achievements and contributions by international specialists in the same direction.

The large number of participations in scientific symposia demonstrates the scientific research activity and commitment of Dr. Georgieva. She is involved in 14 research projects, 4 of which she is the leader of.

Along with teaching and research activities, Associate Professor Georgieva actively participates in the administrative and social activities of the Faculty of Biology, Plovdiv University and the Union of Scientists in Bulgaria. She is the head of the Department of Developmental Biology and deputy chairman of the General Assembly of the Faculty of Biology. She participates in a number of committees, as well as in the organization of various events in the faculty and the university.

## **CONCLUSION**

The documents and materials presented by Assoc. Prof. Dr. Elenka Georgieva meet all the requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria, the Regulations on the Implementation of the Development of Academic Staff in the Republic of Bulgaria Act, and the Regulations for the career development of the academic staff of the Paisii Hilendarski University of Plovdiv.

In the competition, the candidate presented a significant number of scientific works published after the materials used to defend the PhD degree and holding the academic position "Associate Professor". In the candidate's scientific publications, there are original scientific and applied contributions that have received international recognition.

The results achieved by Dr. Elenka Georgieva in the educational and research activities are fully compliant with the minimum national and additional requirements of the Faculty of Biology, adopted in connection with the Regulations of the PU for the implementation of the Act on Development of the Academic Staff in the Republic of Bulgaria.

After getting acquainted with the materials and scientific developments presented in the competition, analyzing their significance and the scientific, scientific-applied and applied contributions contained in them, I find it reasonable to give my positive assessment and recommend the Scientific Jury to prepare a report to the Faculty Council of the Faculty of Biology for the election of Dr. Elenka Stoilova Georgieva to the scientific position of "Professor" at the Paisii Hilendarski University of Plovdiv in the field of higher education: 4. Natural Sciences, Mathematics and Informatics, professional field 4.3. Biological Sciences (Morphology).

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**Prepared the opinion:** .....

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