

STATEMANT

by **Dr. Elenka Stoilova Georgieva - Associate Professor**

Head of the Department of Developmental Biology at the Faculty of Biology, University of Plovdiv "Paisii Hilendarski",

of the materials submitted for participation in the competition
for the academic position of '**associate professor**'
of **University of Plovdiv "Paisii Hilendarski"**

Field of higher education: **4. Natural sciences, mathematics and informatics**

Professional direction: **4.3. Biological sciences**

Scientific specialty: **Cellular Biology**

In the competition for “associate professor” announced in the State Gazette, issue 57 from 26.06.2020 and on the website of the University of Plovdiv "Paisii Hilendarski" for the needs of the Department of Developmental Biology at the Faculty of Biology, as a candidate participates Tsvetelina Georgieva Batsalova - Chief Assistant of the Department of Developmental Biology at the University of Plovdiv "Paisii Hilendarski".

1. General presentation of the procedure and the candidate

By order № P33-4708 of 25.09.2020 of the Rector of University of Plovdiv "Paisii Hilendarski" I was appointed as a member of the scientific jury in a competition for the academic position of **Associate Professor** in the field of higher education 4. Natural Sciences, Mathematics and Informatics, professional direction 4.3 Biological sciences, scientific specialty Cellular Biology, announced for the needs of the Department of Developmental Biology at the Faculty of Biology at the University of Plovdiv "Paisii Hilendarski".

To participate in the announced competition the submitted documents were presented by Dr. Tsvetelina Georgieva Batsalova, assistant professor at the Department of Developmental Biology. The presented set of materials in paper and electronic media are in accordance with the Rules for the development of the faculty, and includes all the necessary documents.

The candidate Dr. Tsvetelina Batsalova has provided 29 scientific papers, 3 textbooks and a list of 12 research projects. 19 scientific papers are accepted for review, which are outside the dissertation and are considered in the final evaluation, 2 textbooks and 12 research projects. The distribution of scientific work is as follows:

- publications in journals with impact factor - 14;

- publications in scientific journals without impact factor - 3;
- publications in proceedings of conferences and congresses - 2;
- schoolbooks and textbooks - 2.

I have no remarks on the set of documents/materials presented by Dr. Tsvetelina Georgieva Batsalova.

Chief Assistant Dr. Tsvetelina Batsalova graduated at Faculty of Biology of the University of Plovdiv from the Bachelor's program in Molecular Biology in 2005, and in 2006 she graduated from the Master's program in Cellular Biology. She defended her dissertation in 2011 on the topic: "Role of MHC class II and post-translational modifications of type II collagen for intercellular communication in rheumatoid arthritis." In 2005-2006 as a laboratory assistant at the Faculty of Biology, she works with animal and human in vitro cell cultures and prepares and conducts laboratory exercises in Cellular Biology. Valuable skills and competences she acquired in 2007-2008, while working as a guest researcher at Lund University, Division of Medical Inflammation Research, Lund, Sweden and also in 2008-2009 when she worked again as a guest researcher at Karolinska Institute, Section of Medical Inflammation Research, Stockholm, Sweden.

The candidate Dr. Tsvetelina Batsalova has more than 9 years of work experience, as of 2011, she was appointed assistant at the department of Developmental Biology, and from 2013 until now she works as a chief assistant at the same department. She has valuable technical skills and competencies. She teaches a lecture course in the specialty, with study hours above the required minimum. The procedure meets the requirements of the Faculty of Biology at University of Plovdiv. All criteria are met, and most indicators - exceeded.

I know the candidate as an extremely responsible, modest, intelligent young colleague who manifests her lasting interests in the field of Cellular Biology, as well as professionally developed competencies as a lecturer and scientist at the University of Plovdiv.

2. General characteristics of the candidate's activity

As a "chief assistant" in Cellular Biology Dr. Batsalova develops lectures for students of undergraduate programs in Cellular Biology; Animal in vitro cultures; Cell and tissue cultures; Stem cells and regeneration; Animal cell cultures and hybridom technologies. She develops lecture courses for students from Master's programs: Molecular-biological methods in clinical diagnostics (specialty Biodiagnostics); Cytological methods in clinical diagnostics (specialty Biodiagnostics); Application of cell and tissue cultures in reproductive biology (specialty Reproductive Biology); In vitro cell cultures and their application in genetics (specialty Genetics); Flow cytometry (specialty Biodiagnostics). Currently Dr. Tsvetelina Batsalova displays general lecture courses for Bachelor degree programs - 130 study hours. In addition, for the Master degree programs - 75 PM. Under her leadership seven graduates have defended their degrees from the Faculty of Biology and she has also supervised 1 PhD

candidate. The presented textbooks (Papers №20 and 21) - Guidelines for practical classes in Cell Biology and Animal Cell Cultures, respectively, are valuable aids for students from different specialties at the Faculty of Biology. Dr. Batsalova conducts the learning process at a high professional level and achieves very good results. As an academic mentor of a total of 16 students for the period 2013-2014 she took an active part in the project "Student Internships", funded by OP "Human Resources Management" funded by EU.

Regarding the scientific and scientific-applied activity Dr. Batsalova presents a total of 19 scientific papers, 2 textbooks and 12 research projects, which are not included in previous procedures. Publications in journals with impact factor are 14 pieces, such as 4 publications with Q1 are presented for alignment with Habilitation having a total Q = 100 points and total impact factor - 24,044. Presented are also 12 scientific publications in journals that are peer-reviewed and indexed in world databases of scientific information (Web of Science and Scopus), outside habilitation work, which has a total impact factor of 17.058. Publications in scientific journals without impact factor - 3 and publications in proceedings of conferences and congresses - 2. All scientific papers submitted for review are co-authored, 19 of them are in English, 2 are in Bulgarian. In 10 of the presented scientific publications, the candidate is a leading author.

The writings of Ch. Assistant Dr. Tsvetelina Batsalova are cited 76 times in scientific journals, referenced and indexed in world-famous databases of scientific information (Web of Science and Scopus). This exceeds twice the required minimum number of 50points, and 152 points are presented. Most citations are in *Toxicon* - 10, *Int J Biol Macromol* - 10, *PLoS ONE* - 10, *J. Am. Chem. Soc.* - 9, *Phytotherapy* - 8, *Carbohydr Polym.* - 7, *Central European Journal of Immunology* - 5, etc., which speaks of the great scientific interest and recognition of the published results.

She also participates in 12 scientific projects, and in 2 of them she is a leader, 5 are from the Scientific Research Fund at the Ministry of Education and Science, the rest from the Scientific Research Fund at the University of Plovdiv. She is a member of the editorial board of the *Journal of Bioscience and Biotechnology* at the Faculty of Biology. She participates in the preparation and conduct of the candidate-student campaign at BF and others. Through these activities she actively contributes to the raising the prestige of the Faculty of Biology at the University of Plovdiv.

The main scientific interests of the candidate are in the field of in vitro cytotoxicity and antitumor activity of various biologically active substances and materials, also in autoimmunity and immunological tolerance, autoantigen- and allergen-specific immune response, bionanotechnology, diagnosis of autoimmune diseases.

The contributions of the materials presented for the contest for occupying the academic position associate professor in a scientific specialty Cellular Biology can be grouped in the

following directions: Contributions to the analyses of the autoimmune response and establishment of cellular-molecular mechanisms of autoimmune diseases; contributions in the field of in vitro cytotoxicology and analysis of biological activity; contributes to elucidating the role of different types of chemokines in pollen allergies outside the pollen season; contributions to the resolution of the taxonomic status of cyanobacterial species; contributions to establishing the effect of prebiotics on the immunomodulatory properties and adhesion of different species and strains of the genus *Lactobacillus*; contributions in the field of bionanotechnology - in vitro analyzes of the cytotoxicity of iron oxide nanoparticles; biofunctionalization of nanoparticles and develop methods for diagnosis of autoimmune diseases; contributions in the field of educational activities.

All quantitative indicators of criteria for holding the academic position of associate professor, both national and specific requirements of the Faculty of Biology are met. The fact that the candidate's citations are from scientific journals, referenced and indexed in world-famous databases is an indicator of the candidate's recognition among the scientific community at home and abroad. The fact that in 10 of the papers the candidate is a leading author, leader of two projects, one of which is national, leaves no doubt about the personal contribution to the development and publication of scientific results.

3. Critical remarks and recommendations

The materials for the competition are very clearly arranged. The necessary references are attached on electronic media, as well as all supporting documents such as certificates, scientific publications with cited works, etc.

I have no critical remarks on either the academic or the scientific work of the candidate.

CONCLUSION

The documents and materials submitted by Ch. Assistant Dr. Tsvetelina Georgieva Batsalova meet all the requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the regulations for implementation of LDASRB and the respective regulations of Plovdiv University.

The candidate in the competition has submitted a significant number of scientific papers, published after the materials used in her doctoral defense and Chief Assistant procedure. In the works of the candidate there are original scientific and applied contributions, which have received international recognition and a representative part of them have been published in journals and scientific collections published by international academic publishers. Theoretical developments have practical applicability, as some of them

are directly oriented to the educational work. The scientific and teaching qualification of Ch. Assistant Professor Dr. Tsvetelina Georgieva Batsalova is undoubted.

The achieved by Ch. Assistant Dr. Tsvetelina Georgieva Batsalova results in teaching and research fully comply with the specific requirements of the Faculty of Biology, adopted in connection with the Regulations of the University of Plovdiv for the application of LDASRB.

After examining the submitted scientific work, analyzing their significance and contained therein science, applied science and applied contributions, I find it reasonable to give my **positive** assessment and to recommend the scientific committee to prepare a report-proposal to the Faculty Council of the Faculty of Biology for the election of Ch. Assistant Professor Dr. Tsvetelina Georgieva Batsalova for the academic position 'associate professor' at the University of Plovdiv in the professional field 4.3 Biological sciences, scientific specialty Cellular biology.

16.11.2020.

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(Assoc. Prof. Dr. Elenka Georgieva)