

STATEMENT

by Assoc. Prof. Dr. Lyuben Ivanov Zagorchev, Department of Biochemistry, Faculty of Biology of Sofia University "St. Kliment Ohridski", member of the Scientific Jury according to the order of the Rector of Sofia University "St. Kliment Ohridski" No. RD-38-180 of 04/05/2022.

regarding: competition for the academic position of associate professor in professional field 4.3. Biological Sciences (Cell Biology), announced for the needs of the Department of Cell Biology and Developmental Biology, Faculty of Biology, Sofia University "St. Kliment Ohridski" in the State Gazette, no. 21 of 15.03.2022.

candidate: An application for participation in the competition was submitted by one candidate – Assist. Prof. Dr. Georgi Nikolaev Georgiev, who provided all the necessary documents in electronic format. The documents have been reviewed by a committee and meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions at Sofia University. The candidate is allowed to participate in the competition.

Biographical data

Assist. Prof. Georgi Nikolaev Georgiev, PhD, was born on 23.11.1980. He acquired a bachelor degree in Biology in Faculty of Biology, Sofia University in 2006 and a master's degree in Cell Biology and Pathology with a successful honors thesis defense in 2008. During this period, he already started working as a specialist biologist at the Institute of Reproductive Biology and Immunology, BAS. In 2012, the development and successful defense of a dissertation work on the topic "Role of melatonin and growth factors in the paracrine regulation of steroidogenesis and the functional characteristics of human reproductive cells" is underway at IBIR for the acquisition of the PhD degree in Animal and Human Physiology. Two years later, in 2014, Georgi Georgiev started working as a chief assistant at the Department of Cytology, Histology and Embryology of the Faculty of Biology, Sofia University after successfully winning a competition, where he is still working.

Compliance with minimum state requirements

The analysis of the documents presented to me shows that in the competition for associate professor, Dr. Georgiev participated with the following materials:

Group of indicators A, Indicator 1: a diploma for the acquisition of PhD degree, covering the required 50 points is presented.

Group of indicators C, Indicator 4: 5 scientific publications referenced and indexed in Scopus and/or Web of Science are presented. The quartiles of the journals are correctly

reflected and the total number of points is 105 out of the required 100. In all of them, Dr. Georgiev is the first or second author. The subject matter of these publications is closely related to the study of melatonin receptors and signaling and corresponds to the volume and monolithic nature of a habilitation thesis.

Group of indicators D, Indicators 7 and 8: 11 refereed and indexed publications and one book chapter are presented. Total points are 250 out of 200 required.

Indicator group D, Indicator 11: 30 citations in Scopus and/or Web of Science and one citation in a non-indexed source are presented, giving a total of 61 points out of the required 50.

A search in Scopus shows that under the name Georgi Nikolaev Georgiev affiliated with Sofia University there are 11 publications, 26 citations and h-index 3. This contradiction is due to the fact that a large number of publications are under the name Georgi Nikolaev. I understand the applicant's difficulty in getting his Scopus profile in order, but I strongly recommend that they take the appropriate steps to merge profiles, claim publications and indicate his individual ORCID number in this type of competition.

Apart from the above, the submitted reference and the verification of the facts show that the candidate fully meets and exceeds the minimum state requirements and the requirements of Sofia University for acquiring the academic position of "associate professor".

Research activity

The scientific contributions of Dr. Georgi Nikolaev Georgiev are in several main directions, namely 1) Immunoendocrine and paracrine interactions in the regulation of steroidogenesis, cell cycle and differentiation; 2) Mechanisms of action of antitumor and anti-inflammatory agents with therapeutic application; and 3) Mechanisms of regulation of cell quiescence and proliferation.

The main scientific topic of the candidate is related to the study of the effect of melatonin in relation to cell differentiation and programming. Original results have been published regarding MT1 and MT2 receptors, their interaction with transcription factors, expression of stem cell markers and the JAK/STAT signaling pathway. An inverse relationship between the expression of P450 aromatase and the MT1 receptor has been demonstrated in samples from healthy donors and patients with reproductive problems, which highlights the importance of the steroid-inhibitory action of melatonin in the male reproductive system.

Regarding antitumor and anti-inflammatory agents, I would like to highlight the demonstrated synergistic effect of miltefosine and dimethylsphingosine on human lung adenocarcinoma cells, as well as the extensive studies on the action of quercetin and resveratrol in three-dimensional cell cultures. Research in cancer cell lines has expanded to investigate factors that disrupt quiescence, the G0 phase, and sequestration of

extracellular signal-regulated kinase (ERK1/2) in lipid rafts has been identified as a factor in entry into this state.

There is no doubt that all of the applicant's scientific contributions satisfy the required competencies of an associate professor in the field of cell biology and developmental biology. The presented scientific contributions are of a fundamental but also of an applied nature. Unfortunately, the submitted documents lack data on participation in scientific projects and only seven participations in scientific forums are presented, which is not necessarily required, but does not provide an opportunity to gain a more general idea of the candidate's scientific achievements.

Teaching activity

The attached reference shows that the Department of Cell Biology and Developmental Biology is able to provide the required teaching hours for the candidate and the need for the occupation of this position is evident. The candidate has an impressive work experience as a chief assistant at the department - nearly eight years, during which he has carried out significant teaching activities, including in the Master's degree. He was the supervisor of six successfully defended diploma theses. My personal impression is that Dr. Georgiev strictly fulfills his teaching duties, he is highly appreciated by the students, both as a lecturer and in conducting practical classes, and he is active in terms of administrative activities in the Faculty of Biology.

Conclusion

In conclusion, I believe that Dr. Georgi Nikolaev Georgiev presents an adequate candidacy for the announced competition for an associate professor, which satisfies both the minimum state requirements of the law and the regulations for its implementation, as well as the internal rules of Sofia University "St. Kliment Ohridski". Significant scientific contributions of a fundamental and applied nature have been demonstrated. The candidate's experience, as an experimenter and as a teacher, meets the needs of the Department of Cell Biology and Developmental Biology. That is why I strongly recommend to the Faculty Council of the Faculty of Biology, Sofia University "St. Kliment Ohridski" to vote positively for the election of ch. assistant professor, Dr. Georgi Nikolaev Georgiev, for the academic position of "associate professor" in professional field 4.3 Biological Sciences (Cell Biology).

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Sofia

/Assoc. Prof. Dr. Lyuben Zagorchev/