

REVIEW

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Regarding a competition for "associate professor" in field 4. Natural sciences, mathematics and informatics, professional field 4.3. "Biological Sciences", scientific specialty "Morphology", announced in SG no. 16 / 23.02.2021 by the "Institute of Experimental Morphology, Pathology and Anthropology with Museum - BAS"

1. Common part

The competition for the academic position "Associate Professor" in professional field 4.3 "Biological Sciences", specialty "Morphology" was announced in SG no. 16 / 23.02.2021 for the needs of the section "Experimental morphology", "Institute of experimental morphology, pathology and anthropology with a museum" - BAS (IEMPAM-BAS). The only candidate in this competition is Ch. Assistant Professor Ekaterina Hristova Pavlova. The review of the submitted documents shows that the competition procedure has been complied with, as well as that the documents meet the requirements of the Law for Development of the Academic Staff of the Republic of Bulgaria and the Regulations for its implementation.

2. Biographical data about the candidate

Ch. Assistant Professor Ekaterina Pavlova graduated with a bachelor's degree from the Faculty of Biology at Sofia University "St. Kliment Ohridski "with a qualification" Teacher of Biology and Chemistry "in 2002 and a master's degree in" Cell Biology and Pathology "at the same university in 2004. Since the same year he has been working at IEMPAM-BAS successively as a biologist (until 2006).), assistant (2011 - 2014) and ch. assistant - from January 2014 until today. In the period 2006 - 2010 he was a doctoral student at the same institute.

3. Scientific works

3. 1. Overview of scientific papers and their citation. Ch. Assistant Professor Ekaterina Pavlova participated in this competition with 18 scientific publications with impact factor (IF). The total IF of these articles is 40.7, and the individual - about 6.7. In three of them she is the first author. They are all in the field of competition. A total of 35 citations of publications of Chief Assistant were noted. Ekaterina Pavlova in Scopus after elimination of auto-citations, and her personal h-index in the same system is 5. The total number of observed citations is 115.

Intensive and quality publishing activity in the last 2 years (5 publications in 2020 and 3 - in 2021 in reputable international journals) suggests that these scientometric indicators will increase significantly over the next few years. 8 participations in scientific forums on the topic of the competition are also included. The summaries published by them are in magazines with IF.

3.2. Evaluation of scientific contributions. The contributions of Ch. Assistant Professor Ekaterina Pavlova are in the field of experimental morphology, toxicology and biochemistry. The main part of them are related to the effects of heavy metals, hypoxia, streptozotocin-induced diabetes, angiotensin II, sodium nitrite and others. on the process of spermatogenesis in experimental animals. The studies were supplemented by knockout mouse models with target-eliminated genes for insulin-like growth factor 1 (IRF-1), which is an important paracrine trophic mediator of Sertoli cells, for its (IRF-1) receptor, and for the Pten gene, which negatively regulates phosphatidyl. -inositol 3 kinase and through it - the intracellular signaling chain activated by IRF-1. In addition, the toxic effects of heavy metals and their accumulation in various organs were studied, as well as the protective effect of two ionophore antibiotics (monesin and salinomycin) in lead intoxication.

3.3. Participation in research projects. Ch. Assistant Professor Ekaterina Pavlova has extensive experience in research and design. She has led 2 research projects - one at BAS and one with FNI-MES for young scientists and post-doctoral students. In addition, she has participated in several international projects - one under the 7th EU Framework Agreement and three under the Operational Program "Human Resources Development", as well as in three national ones - two through bilateral cooperation and five with the NSF at Sofia University.

3.4. Other activities. The membership of Ch. Assistant Professor Ekaterina Pavlova in five (one Bulgarian and four international) companies in the field of the competition. These are the Bulgarian Anatomical Society (BAA), the Network for Young Researchers in Andrology (NYRA), the International Society of Andrology (ISA), the International Federation of Associations of Anatomists (IFAA) and the European Federation of Experimental Morphology (EFEM).

3.5. Awards. Ch. Assistant Professor Ekaterina Pavlova was awarded a grant for participation in an international conference in Germany in 2009 and for the best youth poster in 2018.

Conclusion

The candidate in this competition has significant scientific creativity, participation in scientific projects, has a number of significant scientific and scientific-applied contributions,

sufficient citations and participation in scientific forums. These activities meet the criteria for "Associate Professor" of the Law on the Development of the Academic Staff of the Republic of Bulgaria, of the Regulations for its implementation and of the Regulations for acquiring scientific degrees and holding academic positions at BAS. All this gives me reason to convincingly recommend to the esteemed Scientific Jury to vote FOR the election of Ch. Assistant Professor Dr. Ekaterina Hristova Pavlova for "Associate Professor" in the professional field 4.3. „Biological Sciences”, scientific specialty “Morphology ”for the needs of IEMPAM - BAS.

Signature:

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Sofia, May 12, 2021

(Prof. Dr. Hristo Gagov)