БЪЛГАРСКА АКАДЕМИЯ НА НАУКИТЕ	
И-Т ПО ЕКСПЕРИМЕНТАЛІА МОРФОЛОГИЯ, ПАТОЛОГИН И ВИТОПОТНА И ВИТОПОТАП	
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by Prof. Dr. Dimitar Kadiysky, Doctor of Medical Sciences,

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Appointed by Order № RD-09-10 of 10.03.2021 of the Director of IEMPAM-BAS

In connection with a competition for the academic position "Associate Professor" in the scientific speciality "Morphology" (01.06.26) in the professional field 4.3. Biological Sciences, for the needs of the Section "Experimental Morphology" of the Institute of Experimental Morphology, Pathology and Anthropology with Museum (IEMPAM), published in the State Gazette no. 16 / 23.02.2021

### I. Analysis of the candidate's career profile.

In the mentioned competition the only candidate is chief assistant Ekaterina Hristova Pavlova, doctor from IEMPAM - BAS.

Ch. assistant Professor Ekaterina Pavlova has been a Bachelor since 2002 at the Faculty of Biology of Sofia University "St. Kliment Ohridski" - speciality "Teacher of Biology and Chemistry". She has a Master's degree in Cell Biology and Pathology since 2004. She has been engaged in scientific work at IEMPAM-BAS since the same year as a biologist-specialist (until 2006), assistant (2011-2014) and ch. assistant - from January 2014 until today. After her doctoral studies in the period 2006-2010, Ekaterina Pavlova successfully defended her dissertation thesis at IEMPAM. The topic of her dissertation "Morphofunctional characteristics of the estrogenic effect on spermatogenesis in mammals" is in the scientific speciality "Morphology" (01.06.26), and in the subsequent successful defense she received the educational and scientific degree "Doctor".

At the time of the competition, the candidate holds the academic position of chief assistant, and her research activities include research in the field of hormonal regulation of the testis, functional neuromorphology, as well as some morphofunctional aspects of mammalian spermatogenesis. During her career development, Dr. Ekaterina Pavlova has made research contributions in the field of endocrine and paracrine regulation of spermatogenesis and the impact of the environment on spermatogenesis in mammals. The mechanisms of action of chemical agents (cobalt, nitrites, lead) and their bioaccumulation in various organs of rodents in subacute, acute and chronic treatment are an important object of scientific research carried out by the candidate so far.

## II. General description of the submitted materials in the competition.

From the materials provided to me in connection with the preparation of my opinion on the candidacy of chief assistant Dr. Ekaterina Pavlova it is clear that the candidate meets the whole

set of criteria and indicators for holding the academic position of "Associate Professor", laid down in the amended and supplemented in 2018 **Academic Staff Development Act** and in the **Regulations** for its implementation, emphasizing that chief assistant Dr. Ekaterina Pavlova fully meets the minimum national requirements for holding this academic position. On the other hand, the candidacy of Dr. Ekaterina Pavlova meets all the specific regulations for holding the academic position of "Associate Professor" adopted by the Bulgarian Academy of Sciences and IEMPAM. The materials of the candidate in the competition, presented to me in electronic form, are comprehensive and specific.

# III. Evaluation of the scientific works of the candidate and her overall academic development.

Information on fulfillment of the minimum requirements, publication activity and general characteristics of the scientific production

Dr. Ekaterina Pavlova participated in the announced competition with scientometric indicators that fully meet and exceed the minimum national requirements arising from the Regulations for the implementation of the **Academic Staff Development Act**. The total number of scientific publications in Bulgaria and abroad is 54 scientific articles. Dr. Pavlova has participated in various scientific forums with 113 reports and abstracts. To date, she is aware of 114 citations. The total IF of the candidate is 62.29, and the individual is over 10. There are articles in indexed scientific journals, where the candidate is a leading author. The distribution by years of the publishing activity of Dr. Pavlova speaks of a steady development of the scientific career of the candidate.

The scientometric analysis performed during the evaluation of the candidate's documentation shows that it meets the requirements of the Regulations for application of the IEMPAM – BAS in force from 06.07.2018. D and E are 482. The candidate in certain positions collects a higher number of points above the national minimum requirements for the academic position.

Dissemination and application of the scientific and practical achievements of the candidate among the scientific community

The dissemination of the scientific and practical achievements of the candidate is evidenced by the large number of her participations in various scientific forums - 113 in Bulgaria and abroad.

Characteristics of the research activity of the candidate

The research of Dr. Ekaterina Pavlova has an interdisciplinary biomedical orientation - experimental morphology and experimental modeling, immuno- and enzymohistochemistry, biochemistry and others. The scientific contributions are summarized in three broad areas, which are formulated in great detail and arranged in the report presented by the candidate: 1) morphofunctional aspects of mammalian spermatogenesis 2) functional neuromorphology 3) mechanisms of action of chemical agents (cobalt, nitrites, lead) and their bioaccumulation in various organs of rodents in subacute, acute and chronic treatment.

#### IV. Publication image.

The quality of the research activity of Dr. Ekaterina Pavlova is indicated by the number of registered positive citations of her works - a total of over 100, and 34 citations the candidate now finds in Scopus.

### V. General assessment of the applicant's compliance and conclusion.

The candidacy of Dr. Ekaterina Pavlova in the competition of IEMPAM-BAS, announced for the academic position "Associate Professor" fully complies with the required mandatory conditions, quantitative and qualitative criteria, as well as scientometric indicators in the relevant documents adopted by BAS and IEMPAM on the basis of **Academic Staff Development Act**. All this, together with the set of real scientific and organizational contributions in the implementation of important research projects of the candidate gives me reason to recommend to the esteemed Scientific Jury, appointed in connection with the announced competition, to vote for a positive proposal to the Scientific Council Ekaterina Hristova Pavlova to be elected to the academic position of "Associate Professor" in the scientific speciality "Morphology" (01.06.26).

June 10, 2021	
Sofia	/ prof Dr. Dimitar Kadiysky, MD, DSci/