OPINION

by Prof. Minko Minkov, MD, PhD

on the competition for the academic position of "Professor" in the field of higher education 7. „Health and sport" in the professional direction 7.1 "Medicine" and scientific specialty "Anatomy, Histology and Cytology" for the need of the Medical Faculty to the University of Burgas „Asen Zlatarov", announced in the State Newspaper, Issue 59/16.07.2021, with one candidate Associate Professor Ivaylo Stefanov Stefanov, PhD.

1. Brief biographical data

Associate Professor Ivaylo Stefanov Stefanov was born on March 2, 1972 in the city of Vratsa. He completed his secondary education in Vratsa in 1991. He graduated Veterinary Medicine in 1997 at the Faculty of Veterinary Medicine, Stara Zagora. In 2000 he took the position of an assistant professor in the Division of "Histology" at the Department of Veterinary Cytology, Histology and Embryology. In 2006 he became an assistant professor in the Division of "Anatomy" at the Department of "Veterinary Anatomy, Histology and Embryology" where he became a senior assistant professor in 2007. and later chief assistant professor in 2011. Following a successful defense of a doctoral dissertation entitled "Morpho-functional features of the perianal sinus in dogs" in 2011 he was awarded a PhD degree in the scientific field of Anatomy, Histology and Cytology. In 2013, from 18 February to 18 May he specialized in the Czech Academy of Sciences in COST Action BM 1007 on "Mast Cells and Basophils - Targets for Innovative Therapies", Prague, Czech Republic.

Since 2016, he has been an Associate Professor in the scientific specialty "Anatomy, Histology and Cytology", the field of higher education 7. Health and Sports ", professional direction 7.1."Medicine" at a full-time position at the Medical Faculty, Thrakia University, St. Zagora.

2. Pedagogical activity

Assoc. Prof. Ivaylo Stefanov has a total of 21 years teaching experience, from which 5 years as an Associate Professor at the Department of Anatomy, Medical Faculty, Thrakia University, St. Zagora In his practice as an Associate Professor he has been conducting practicals, seminars and colloquia with medical students in the compulsory disciplines "Cytology, General Histology and Embryology" and "Human Anatomy" in Bulgarian and English, as well as with nurse and midwife studying students in Human Anatomy. Associate Professor Ivaylo Stefanov delivers lectures and theoretical exams in the same disciplines. The teaching load of the candidate according to the documents applied for the period 2016 - 2021 varies from 260 to 448 academic hours. Together with colleagues from the department he has published three manuals in cytology and histology for students of Medicine, and three manuals with colleagues from other departments in Bulgarian and English.

Based on the overall pedagogical activity of assoc. prof. Ivaylo Stefanov, I do believe that he has the necessary qualifications and proven qualities of a lecturer with high professionalism.

2. Scientific activity

His scientific activity is represented in 18 full text scientific articles in English (referred and indexed in worldleading databases with scientific information such as „Scopus" and „Web of Science"), from which 6 articles in scientific thematic journals with Impact Factor, 8 articles

in journals with SJR, 4 publications in journals without impact factor, referred in Scopus or Web of Science, as well as 7 abstracts. In 7 scientific publications he is the first co-author, in 1 of which – a sole author. In 5 publications he is the second author, and in 7 articles - the last one. He guides students and doctoral students in conducting research, which are an integral part of the author's team of some of the presented scientific publications. Its total Impact Factor is 2,358. He participated in 4 Scientific projects, in one of which he is a supervisor. The candidate took part at 16 congresses, conferences and symposia, as in Bulgaria - 13, and abroad - 3. He participated in the Organizing Committee in holding a scientific forum with international participation. He has prepared opinions as an internal and external member of Scientific Juries in connection with the procedures for holding the academic position of "Chief Assistant" and "Associate Professor" as well as in connection with the procedure for awarding a PhD degree. The candidate has submitted a list of reviews of scientific publications for foreign and Bulgarian specialized journals with Impact Factor and SJR. The monograph is the sole work of Stefanov. This is a comprehensive scientific work focusing on the application of various methods (morphometric, histochemical and immunohistochemical) of the study of mast cells in the gallbladder and extrahepatic bile ducts in pigs as an experimental model, which is written on 100 pages and illustrated with 44 figures. As a research supervisor, he passed on his research experience to students and a PhD student from the Department of Anatomy at the Medical Faculty, Thrakia University, who successfully defended his dissertation titled "Histochemical, immunohistochemical and quantitative characteristics of mast cells in the lung" in 2019. Ivaylo Stefanov took part in writing 6 manuals. He presented 12 citations with a total Impact Factor = 12.713.

Taking into account these facts, I believe that the candidate categorically meets the minimum national requirements for holding the position of Professor.

Ivaylo Stefanov is a regular member of the Bulgarian Anatomical Society (He is a member of the Management Board of BAS), the Union of Scientists - Stara Zagora and the European Association of Veterinary Anatomists.

3.1. Contributions

The contributions are presented in a high scientific style and analyzed in detail. Specifically, the scientific developments of the candidate and their contributions can be combined in the following main thematic areas:

- Gross anatomy of the porcine ureters, macrovascularization and microscopic study of gallbladder. (4 publications are applied). These studies provide original macromorphometric data on the course, diameter and length of the intramural part of the ureters in pigs. Data on the variations in the origin of A. cystica as well as peculiarities in the topography of its branches in pigs, in a comparative aspect with humans, are presented. Original data on histochemical analysis and age-specific features in the expression of glucosaminoglycans in the wall of the porcine gallbladder are reported.
- Morphometric, histochemical and immunohistochemical studies on mast cells, endocrine cells and nerve structures in the extrahepatic bile ducts and gallbladder of pigs, as well as in the normal lungs of rats and humans (11 publications are applied). Original data are presented on the distribution of mast cells in the porcine spinal ganglia, which have a metabolic pathway for nitric oxide production similar to neurons

and nerve fibers, which contributes to elucidating the mechanism of pain modulation and developing a new approach to pain therapy.

- Immunohistochemical studies on mast cells in human lung disease (1 publication is applied). For the first time, data on the localization and phenotypic characteristics of mast cells are provided with a focus on ghrelin expression in the development of respiratory distress syndrome in neonates. Ghrelin increases the importance of mast cells and may help to elucidate the mechanism by which these cells maintain pulmonary homeostasis, as well as to develop more reliable methods for diagnosing, preventing, and treating respiratory distress syndrome.
- • Immunohistochemical expression of ghrelin in human stomach cancer (1 publication is attached). Based on the immunohistochemical identification of ghrelin-positive mast cells in the tumor parenchyma, as well as the performed quantitative analysis, it is assumed that ghrelin plays an important role in carcinogenesis and as a marker for predicting and diagnosing patients with gastric cancer.
- Morphological changes in nerve structures and mast cells after experimental acupuncture in a rat at acupuncture point ST36 (1 publication is applied). It has been found that acupuncture stimulates mast cells to degranulation, which leads to the activation of the interaction between the immune and nervous systems, stimulating the peripheral nerves, which triggers acupuncture signals.

4. Assessment of the candidate's personal contribution

The presented set of documents proves the personal contribution of Assoc. Prof. Ivaylo Stefanov Stefanov in the educational activity of the department.

His personal contribution to the research work is documented by the presentation of 7 scientific publications, in which he is the first author, in 1 of them - a sole author, in 5 publications he is a second author and in 7 articles he is the last one.

5. Critical remarks and recommendations

I have no critical remarks on the materials presented. The scientific publications are written in a good scientific style and contain original contributions.

6. Personal impressions

Assoc. Prof. Ivaylo Stefanov Stefanov takes part actively in the educational and research activities, which is supported by relevant evidence.

7. Conclusion

Based on the materials presented in the competition, which correspond to the requirements for the scientific development of the academic staff of the University of Burgas "Prof. Dr. Asen Zlatarov ", I strongly recommend the members of the Scientific Jury to vote positively for the proposal to the Faculty Council, Assoc. Prof. Ivaylo Stefanov Stefanov to be elected to the academic position" Professor" in the scientific specialty" Anatomy, Histology and Cytology " , for the needs of the Medical Faculty at 0.5 full-time position .

Дата: Подпис:

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