

REVIEW

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RE: Competition for "Associate Professor" in the field of higher education 7. Healthcare and sports, professional direction 7.1. Medicine, specialty "General and Clinical Pathology", at the Faculty of Medicine, Department "General and Clinical Pathology, Forensic Medicine and Deontology", MU-Varna and Clinic "Clinical Pathology" at Saint Marina University Hospital - Varna, according to an announcement in State Gazette, no. 7 of 23.01.2024. By order of the Rector of the MU - Varna No. P-109-100 from 22.03.2024, I have been elected as an internal member of the Scientific Jury, and on the basis of Protocol No. 1/04.01.2024 from a meeting of the Scientific Jury, I am determined to prepare a review. Documents for the competition were submitted by one candidate - Dr. Hristo Boychev Popov, MD, chief assistant at the Department of General and Clinical Pathology, Forensic Medicine and Deontology, at the Medical University - Varna.

I. Analysis of the candidate's career profile

Dr. Hristo Boychev Popov was born on September 19, 1986 in the city of Provadia. He completed secondary education (2001-2005) at "Dimitar Blagoev" Secondary School in Provadia. In 2011, he graduated from the Medical University - Varna, majoring in "Medicine" (diploma with Reg. no. 1495 from 22.11.2011) and was elected an assistant in the Department of General and Clinical Pathology at the Medical University - Varna after a successful presentation in a competition. As an assistant, Dr. Popov participates in the academic work of the Department - he conducts practical classes in all taught disciplines with medical and dental students. On 01.06.2017, he acquired the

specialty "Pathology and cytopathology". As an-assistant in the Clinic of Pathology at "St. Marina" University hospital, Varna, he deals with the diagnostic process in the hospital, mastering all the basic methods of biopsy practice and showing interest in renal puncture biopsies, transplant pathology and skin biopsies requiring examination by immunofluorescence microscopy, for which he has extensive knowledge and skills.

In 2020, he obtained a PhD degree S with a dissertation on: "Prognostic and predictive morphological factors in urothelial carcinoma of the bladder". By tht time, he participated in two research projects, as a PhD student and a postdoctoral fellow, funded by the "Science" Fund. Dr.Popov is a member of the Bulgarian Medical Union, the Bulgarian and European Society of Pathology and the Society of Renal Pathology.

II. Scientific indicators

The candidate submitted for evaluation a total of 28 full-text publications in Bulgarian or English, distributed as follows:

- dissertation work for the acquisition of the ONS "doctor" on a topic (without abstract): "Prognostic and predictive morphologic factors in urothelial carcinoma of the bladder", 2020
- 10 full-text scientific papers in Publications that are referenced and indexed in world-renowned databases with scientific information (Web of Science and Scopus), recognized by NACID at the Ministry of Education and Science - replacing a habilitation monographic work
- 9 full-text scientific publications (G7) in refereed and indexed world-renowned databases of scientific information
- 8 full-text articles (G8) in non-refereed publications

- one more article, beyond the minimum scientometric requirements
- Additional materials from reports and posters (total 19), presented at different scientific forums

Dr. Popov's publication activity thematically covers a wide range of scientific fields in Pathology, with an emphasis on the diagnosis of diseases of the urinary tract. This includes the PhD thesis, as well as a large part of the full-text publications. It is noteworthy that the scientific activity of Dr. Popov is aimed at solving practical problems. The main goal of the dissertation work is to look for microscopic signs of the most essential characteristic of urothelial carcinoma of the urinary bladder - the high frequency of recurrence after surgical removal.

Dr. Popov found that easily applicable methods, such as evaluation of tumor-associated tissue eosinophilia and/or mastocytosis provide statistically significant data for the tumor microenvironment that influence the propensity for local recurrence. A number of immunohistochemical markers, such as neprilysin (CD10), fibroblast growth factor (FGF), transcription factor GATA3, cytokines (CK20, gp130) statistically correlate with the biological behavior of bladder cancer and are related to its phenotypic manifestations - invasiveness, differentiation, nodal status, survival.

Another group of studies tries to establish similar factors in colon cancer - expression of Beclin-1 in tumor cells, necroptosis, which is dependent on receptor-interacting protein 3 (RIPK3). These studies analyze alternative molecular mechanisms of cell death and survival. In several articles, together with other colleagues, Dr. Popov examines the morphological aspects of the burning issue of severe acute respiratory syndrome coronavirus 2 COVID 19. It is a personal merit of Dr. Popov to study the details of renal changes - incompletely described so far.

Case history occupies a significant part in the scientific activity of Dr. Popov. In the descriptions of biopsy and autopsy cases published by Dr. Popov, nephropathology is again present, such as analysis of rare neoplasms of the kidneys, Balkan endemic nephropathy. In addition, cases with rare localization of gout, cystic fibrosis, extranodal lymphomas, leiomyosarcoma of the tongue, retrolental fibroplasia, mucosal melanomas, diabetic fetopathy have been described.

Most of these scientific activities are carried out by authors from different medical specialties, which testifies to an interdisciplinary approach and Dr. Popov's ability to work in a team. In two articles out of all, the candidate is an independent author, and in most of others - he is the only pathologist among the authors. Last but not least, the candidate's scientific output demonstrates a thorough knowledge, accurate selection and skillful application of both classical pathology methods and the latest diagnostic procedures.

The main scientific achievements in the publications are primarily related to the clarification of various aspects of the pathological practice. Scientific contributions in the field of nephropathology are original and most significant. A large part of scientific developments have an applied nature, aimed at solving both diagnostic and therapeutic problems.

The methods - morphological, immunohistochemical, molecular-genetic and experimental, i.e. the complex approach applied by the candidate reveals a prepared and original thinking scientist, able to perceive scientific problems and generate ideas to obtain original results. It is not by chance that the candidate's publications are significantly reflected in scientific periodicals. The scientometric indicators in the documentation submitted by the candidate and the Academic Reference prepared by the Library of the Medical University - Varna are compared with the requirements of the Regulation for occupying the academic position "Associate Professor" in the following Comparison Table:

INDICATORS	CONTENT	Assoc. Professor (points)	Dr.Popov (points)
A	Indicator 1	50	50
B	Indicator 2	Not required	
C	Indicator 3 or 4	100	102.57
D	Sum of indicators 5÷9	200	237.95
E	Sum of indicators 10÷12	50	150
Impact Factor - 17.691			

It can be seen from the Comparison Table that the evidentiary material for scientific activity submitted by the candidate meets the regulatory requirements for the position under the competition.

III. Teaching and learning activity

As soon as he was selected as an assistant, Dr. Popov was included in the pathology training of students in the master's programs in medicine and dentistry and of bachelors - nurses, laboratory assistants and kinesitherapists. The Medical University - Varna has issued to Dr. Popov a Certificate (No. 099-645/ 31.01.2024) proving almost 12 years of teaching experience. Over the years, Dr. Popov established himself as a university professor with extensive experience, respected by students and colleagues.

IV. Therapeutic and diagnostic activity

Dr. Popov is proficient in all methods of diagnostic pathology and makes efforts to follow the latest developments in the specialty by participating in various events to maintain qualifications in the country and abroad - diagnostic seminars, pedagogical courses, learning of methods and diagnostic algorithms, for which he has provided relevant documentation.

Dr. Popov has particularly valuable knowledge and skills in the assessment of renal puncture biopsies, including transplant pathology - drug toxicity control

and rejection reactions. He managed to get personal experience in this difficult diagnostic process, gaining access to the rich information of the few national experts in the nephropathology field and from several participations in expert courses abroad. Immunofluorescence microscopy is an indispensable method in this field, and Dr. Popov applies it successfully, also in the morphological diagnosis of dermatological biopsies. Last but not least - Dr. Popov is already sharing his experience with young pathologists and in the near future he is shaping up to be a leading expert in this activity.

The authority of Saint Marina University Hospital - Varna certifies (No. 54/18.02.2024) that Dr. Popov has 12 years of work experience in the specialty.

V. CONCLUSION

The documentation submitted for the Competition is in full volume and meets the procedural requirements in the regulatory framework. The candidate's scientific output corresponds to the required criteria. I accept the contributions without any objection. I am impressed by the candidate's personal and professional qualities and I believe that he will fully cope with the challenges of the position for which he is applying.

For these reasons, I confidently fulfill my obligations and vote positively for Dr. Hristo Popov to receive the academic position of "Associate Professor" for the needs of the Department of General and Clinical Pathology, Medical University - Varna.

15.05.2024

Varna

signature:

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(Prof. Dr. Peter Ghenev, PhD)