# **REVIEW**

by Professor Dr Dimitar Petkov Sivrev, MD, PhD - Department of Anatomy at Medical Faculty of Trakia University, Stara Zagora,

<u>Subject:</u> Holding a competition in the field of education 7. Healthcare and sports, by scientific field 7.1. Medicine, for the academic position "Associate Professor", speciality "General and Clinical Pathology", for the needs of the Department of General and Clinical Pathology, Forensic Medicine and Deontology, Faculty of Medicine, Medical University - Varna. The competition was announced in the State Gazette No. 8/28.01.2020.

Dr. Svitlana Yurievna Bachurska, Ph.D., submitted documents for the announced position within the legal term.

## Analysis of the attached documents

The candidate has submitted the necessary administrative documents required for the academic position of "Associate Professor".

#### Analysis of education and qualification

Dr. Bachurska has presented detailed documentation in accordance with the requirements of the "Academic Staff Development Act" and the "Regulations for its implementation". According to the attached diploma for higher education (series MuP-05, № 005303) Dr. Bachurska completed in 2005 the full master's course of the Medical Faculty, Medical University - Ploydiv with the qualification "physician". The professional development of the candidate marks several main points. From 2011 to 2017 Dr. Bachurska is a specialist in General and Clinical Pathology at the University Hospital "St. Georgi"- Plovdiv. In 2017 and 2018 she worked as a specialist and head of the Department of Clinical Pathology at the Hospital - Asenovgrad. In 2018 he was the head of the Clinical Pathology Department at the Plovdiv Medical Center. In 2019 he started working as head of the Clinical Pathology Clinic in USBALO - Sofia, where he still works. According to a transcript of the candidate's employment record, Dr. Baruska has about 10 years of experience in the specialty, of which: medical representative of Pfizer Luxembourg SARL - 3 years, 11 months and 14 days, assistant and chief assistant at MU, Ploydiv. 5 years, 6 months and 7 days, a doctor in MHAT Asenovgrad EOOD - 6 months and 2 days, USBALO-LTD, Sofia - continues to work until now.

The academic development of Dr. Svitlana Bachurska began in 2011 when she was an assistant in the Department of General and Clinical Pathology at the Medical University - Plovdiv. From 2017 to 2020 she is a senior assistant and doctoral student in an independent form of education in the same department, majoring in Pathology and Cytopathology. He defended a dissertation on "Diagnostic value of ERG in the immunohistochemical panel for the detection of prostate cancer by needle biopsies" and obtained an educational and scientific degree "PhD". The teaching experience of the candidate Dr. Bachurska is proved by Certificate № P-723/30.03.2020, issued by the Medical University - Plovdiv. According to him, her experience as an assistant is 5 years and 8 months, and as a senior assistant - 2 years, 5 months and 24 days.

#### Opinion on social skills and competences

According to the presented CV, the candidate has high communication and good opportunities for teamwork, as well as the ability to organize scientific and experimental activities.

In her professional field, Dr. Bachurska applies methods of morphological diagnosis aimed at neoplastic formations of the prostate. Her research is related to prostate cancer, needle biopsy and diagnostic problems, as well as rare histological forms of prostate cancer. The candidate for the academic position of "Associate Professor" has experience in research projects. She has led an University project NO-12/2018 at the Medical University - Plovdiv on "Immunohistochemical subtyping of patients with colorectal cancer in correlation with KRAS mutation status and microsatellite instability."

Dr. Bachurska was a scientific consultant in the dissertation of Dr. Nikolay Nikolov from FDM at MU-Plovdiv, on the topic: "Non-invasive methods for early diagnosis of oral preneoplasia."

He speaks Russian and English - written and spoken.

### Teaching work

For the period 2011-2019 Dr. Svitlana Bachurska has led practical exercises in General and Clinical Pathology of students in medicine, dentistry and pharmacy both in Bulgarian and in English language teaching.

From the attached reference for the study load it is evident that in the academic year 2013-2014, Dr. Bachurska trained 434 students, of which - 390 students from the Faculty of Medicine and 44 students from the Faculty of Dental Medicine. During the same academic period she took part in the exams of 20 students from the Medical University - Plovdiv. In the academic year 2014-2015 it taught 448 students from the same faculties, and in the 2015-2016 academic year the students were 478. In the 2017-2018 academic year the students were 540, and in the 2018-2019 academic year - 464 students.

In support of the teaching work, the candidate has participated in the publication of manuals, textbooks and teaching aids: "Sample tests in Clinical Pathology for medical students" (2018) and "Sample tests in General Pathology for medical students" (2018). For students of pharmacy in English was published "General and Clinical Pathology" (2018), and for students of dental medicine, also in English - "Practicals of General and Clinical Pathology". "Manual for students in Dental Medicine" (2017). "Practicals in Clinical Pathology" (2017) is an English edition for medical students - English language training, "Practicals - General Pathology for medical students" (2017), "Manual in General Pathology for medical students with CD (2017)", "Practical exercises in General and Clinical Pathology for dental students" (2017), "Practical exercises in Clinical Pathology - materials for preparation of medical students with a study CD" (2016), "Practical exercises in General Pathology - a guide for medical students with a study CD" (2016), "General and Clinical Pathology for pharmacy students" (2016), "A look at the pathology" - a textbook for students in health specialties (2018) ), "Lecture course in General and Clinical Pathology for medical students" (2017), "Lecture course in Clinical Pathology for medical students" (2017), "Lecture course in General Pathology for medical students" (2017). Also of interest are "SampleMCQs in Clinical Pathology for Medical Students" (2018) and "SampleMCQs in General Pathology for Medical Students" (2018),

#### Analysis of research activity

The evaluation of the research activity is based on the criteria adopted in the Republic of Bulgaria for holding the academic position "Associate Professor", reflected in the

"Law for the Development of the Academic Staff" and the "Regulations for its implementation".

The candidate, who submitted an application for participation in the competition, submitted a list of the titles of a total of 40 scientific publications with a total volume of 182 pages. The attached academic report prepared by the library of USHATO - Sofia shows information from international scientific databases: Web of Sciences, Scopus, Google Scholar, which shows that 21 of the candidate's articles are referenced in these databases, and 18 have been published in unreferred peer-reviewed periodicals. It is evident from the presented academic report that 10 of the publications are referred to in Scopus (None 1, 4, 7, 8, 9, 10, 14, 17, 18, 21) and 11 are in Web of Sciences (None 2, 3, 5, 6, 11, 12, 13, 15, 16, 19, 20).

The candidate for the academic position of "Associate Professor" has participated with 50 papers in Bulgarian and foreign scientific forums, which are a scientific asset. She has a registered active scientific profile in Google Scholar, ORCHID and Publons.

The list of scientific publications may include the dissertation for obtaining a scientific and educational degree "PhD" on "Diagnostic value of ERG in the immunohistochemical panel for the detection of prostate cancer by needle biopsies", as well as the abstract to the same dissertation. The list of 4 actually printed full-text publications is also presented, apart from the participants in the evidence to cover the minimum requirements for holding the academic position of "associate professor".

The candidate has attached an academic reference with 10 citations in scientific journals, referenced and indexed in a world-famous database with scientific information or monographs and collective volumes. 13 are cited in monographs and collective volumes with scientific review and 5 citations or reviews in non-refereed journals with scientific review.

### Contributions to scientific papers

The scientific activity of Assistant Professor Dr Svitlana Yurievna Bachurska is focused on the study of pathological changes in the liver and methods related to their diagnosis as well as the morphological problems of prostate oncopathology. Separate studies have focused on paratesticular well-differentiated liposarcoma diagnosed as

fibrous pseudotumor, angiosarcoma of the breast associated with radiotherapy, pyogenic granulomas affecting the skin of the face and oral mucosa, primary synchronous bilateral breast cancer. Particular attention is paid to the morphological dilemmas of prostate oncopathology, which are presented in a monograph with the same title.

The monograph examines the variety of morphological features in benign prostate lesions that mimic the picture of cancer. The monograph presents diagnostic immunohistochemical markers that are used in the diagnosis of benign processes and allow their differentiation from prostate cancer.

It is evident from the presented author's reference that in addition to 86 titles of scientific papers, which do not repeat the submitted for acquisition of "PhD", the candidate has attached a list of scientific and theoretical contributions in the field of oncopathology, oral pathology and experimental oncomorphology.

In the field of oncomorphology 7 scientific-theoretical contributions have been applied, two of which are published for the first time in our country, namely:

- 1. Comprehensive analysis of prostate pathology using the latest classification schemes and algorithms for diagnostic categorization of benign and malignant changes of the prostate gland.
- 2. Study of the tendencies in the development of oncological diseases of the urogenital system on biopsy material for a period of 15 years.

Rare tumors of the urogenital and neuroendocrine systems have been identified, studied and described. Genetic analysis was performed with description of clinical and morphological features of pheochromocytoma, morphological changes and deviations of predictive markers of breast cancer were described, diagnostic possibilities for distinguishing neoplastic from inflammatory diseases of the stomach were analyzed and pathomorphological and immunohistochemical features were studied, carcinoma in correlation with microsatellite and KRAS status.

Five contributions in the field of oral pathology are presented, which describe the results of scientific research conducted for the first time in our country.

In the field of experimental morphology, two contributions have been applied, one of which is related to the animal experimental model of closed chest trauma in mice, created for the first time in our country.

There are also 7 scientific and practical contributions related to the morphological assessment of "difficult" prostate lesions, study of predictive markers of breast cancer, features of colorectal cancer, as well as the results obtained after the application of various medicinal agents in the oral cavity.

Conclusion

Based on the analysis of the documents and materials presented to me, and taking into account both the theoretical and practical contribution of research, as well as the business and organizational qualities of the candidate in the competition for the academic position of "Associate Professor", I believe that Dr. Svitlana Yurievna Bachurska, MD is a built scientist with achievements in science, demonstrated by its published results. She has led a university research project, has articles published in authoritative Bulgarian and foreign journals. She has presented 10 citations of her scientific publications in Bulgarian and foreign scientific journals.

Dr. Bachurska presented a monograph related to solving problems of clinical pathology, as well as participation in 16 manuals, textbooks and teaching aids in General and Clinical Pathology in Bulgarian and English, designed to train students from three faculties and health specialties. All its assets are supported by evidence.

The original and confirmatory contributions presented by the candidate for the academic position of "Associate Professor" speak of a serious attitude towards science and a desire to seek the practical application of research.

Due to the above, I propose to the esteemed Scientific Jury to rank Dr Svitlana Yurievna Bachurska, PhD for the academic position of "Associate Professor" and to present her for election to the relevant Scientific Council of the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna.

14.07.2020 год Stara Zagora Reviewer:

/Prof. Dr Dimitar Sivrey, MD, PhD/