To the Chairman of the Scientific Jury Order № P-109-285/16.6.20 y. By Rector of Medical University-Varna

In reference to Protocol: № 20/16.3.2020 y and Order № P-109-351/05.06.2018 y, from the meeting of Scientific Jury

#### Attached I present: Statement

In the contest for the academic position "Associate Professor" in the scientific specialty "General and Clinical Pathology", for the instance of Medical University-Varna, Department of the General and Clinical Pathology, Forensic Medicine and Deontology, Faculty of Medicine announced in the Government Newspaper, issue 8/28.01,2020 y.

## The Statement is done by Prof. Dobrinka Demireva Radoinova, MD, PhD

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There is a single candidate in the contest: Svitlana Yurievna Bachurska, MD, PhD, from USBALO-Sofia, Clinic of General and Clinical Pathology.

The necessary complete parcel of the administrative documents according to the requirements of the Löw of the development of academic staff and Regulations for the academic position of "Associate Professor" of the Rules of the MU-Varna is presented.

## I.Analysis of the carrier profile of the candidate

#### 1. Education and qualification

The examination of the documentation established that the candidate Dr. Svitlana Bachurska fulfill the conditions of the contest: she has completed higher education in medicine (diploma № 005303 from MU Plovdiv / 1999-2005), certificate of acquired specialty in pathology and cytopathology (№ 002419 from 28.06.2016). She owns PhD degree in the scientific specialty: Pathoanatomy and Cytopathology (diploma № 196 from 1.6.2017 MU-Plovdiv) in the Department of General and Clinical Pathology in MU - Plovdiv. The candidate has also completed courses: dermatopathology by Bulgarian Medical Union in 2018; Statistical program package SPSS by MU-Plovdiv in 2014, several courses at the European Accreditation Council for continuing education.

#### 2. Work experience

From the submitted documents it is seen that Dr. Bachurska has a total professional work experience /to 30.3.20 / - 8 years 11 months and teaching experience as to the same date - 8 years and 1 month.

## 3. Educational responsibility and teaching activity

From the Academic teaching reference it can be seen that for the presented 5 academic years / 2013-2019 /, the workload according to the norm for non-habilitated assistants is 270 hours, Dr. Bachurska has over 430-540 hours for each of the indicated school years, i.e. exceeds the norm. The workload is filled with practical exercises in medicine, dentistry and pharmacy - Bulgarian and English language training.

Dr. Bachurska was the Leading investigator of the University project NO-12/2018 in MU-Plovdiv on the topic: "Immunohistochemical subtyping of patients with colorectal cancer in correlation with KRAS mutation status and microsatellite instability."

## 4. Administrative-academic activity

Dr. Svitlana Bachurska worked as an assistant in the period 2011-2017 and as a senior assistant in the period 2017-2019 in the Department of General and Clinical Pathology at MU-Plovdiv. She performed practical and theoretical lessons in General and Clinical Pathology to the students in medicine, dental medicine and pharmacy. In the period 2017-19 she accomplished a PhD doctorat in the self-training form in the same department on the topic: "Diagnostic value of ERG in the immunohistochemical panel for the detection of prostate cancer in needle biopsies".

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

The submitted documents of the candidate are complete and accurate, they are presented in a logical sequence according to the requirements of the contest. Articles, textbooks and manuals from congress and conference presentations are numbered separately. The materials for the contest for the academic position "Associate Professor" are also presented separately.

# III. Assessment of the scientific works of the candidate for his overall academic development

For this contest Dr. Bachurska has presented 1 abstract of a PhD thesis, a monography (habilitation thesis), 21 publications and reports published in scientific journals, reffered and indexed in worldwide databases with scientific information and 18 publications and reports published in non-peer-reviewed journals with scientific review or published in edited collective issues.

She has also participated in conferences and symposia.

1. General characteristics of the scientific production and the publishing activity

#### Dr. S. Bachurska has presented sufficient scientific production:

- in criterion D, indicator 7 she is the first author in 10 publications out of 21;
- in indicator 8 she is the first author in 4 publications out of 18;
- Her monography "Morphological Dilemmas of Prostate Oncopathology" is a contemporary view and overview of this important issue for the male population. There are two reviews from Prof. Dr. Iv. Dechev and Assoc. Prof. Dr. Y. Ananiev. It is illustrated with 23 figures and histographs.
- Her PhD thesis: "Diagnostic value of ERG in the immunohistochemical panel for the detection of prostate cancer in needle biopsies" was highly appreciated by the Scientific Jury.
- 2. Scientific activity dissemination and application of the scientific and practical achievements of the candidate among the scientific community

According to the presented reference, Dr. Bachurska has 10 cited in scientific journals, referenced and indexed in worldwide databases with scientific information; 13 citations in monographs and collective volumes with scientific review and 5 citations in unreferred journals with scientific review.

## 3. Participation in implementation and project management

Dr. Bachurska was the Leading investigator of the University project NO-12/2018 at MU-Plovdiv on the topic: "Immunohistochemical subtyping of patients with colorectal cancer in correlation with KRAS mutation status and microsatellite instability."

4. Scientific and creative achievements (scientific authority) (additional indicators): research activity - membership in organizations, editorial boards, juries, awards, reviews).

According to the information provided to us, Dr. Bachurska has scientific and theoretical contributions in the following scientific fields:

- -oncopathology;
- -pathology of the oral cavity;
- -experimental morphology.

#### 5. Medical-diagnostic activity

The candidate Dr. Bachurska has almost the same overall professional and teaching experience (respectively 8 years and 11 months and 8 years and 1 month). It is apparent from the documents submitted that she effectively combined the both activities.

## IV. Assessment of the publications submitted for participation in the contest

In the contest, Dr. Bachurska has presented scientific publications that do not repeat those submitted for the acquisition of PhD degree. They are: in addition to the dissertation, a monography (Morphological dilemmas of prostate oncopathology); 13 full-text publications in peer-reviewed journals, 22 full-text publications in non-peer-reviewed journals; 50 participations in the scientific forums.

## 1. Assessment of the scientific papers with contributions in the field of oncopathology

The candidate has made a comprehensive and exhaustive analysis of the prostate pathology, applying modern classification schemes and algorithms for diagnostic categorization of benign and malignant processes in the prostate. She investigated the trends in the development of oncological diseases of the urogenital system on biopsy material for the period 2001-2016 at the University Hospital "St. George". Dr. Bachurska has identified, studied and described rare tumors of the urogenital and neuroendocrine systems.

As a result of the habilitation work is an establishment of a model for morphological assessment of the so-called "Difficult" prostate lesions, as well as an algorithm for the amount and sequence of antibodies used in each case.

For the first time in our country it has been made genetic identification with a correlation of the clinical and morphological features in inherited pheochromocytoma associated with VHL syndrome.

Dr. Bachurska examined the changes in the prostate gland in correlation with category IV prostatitis on the autopsy material, as well as the population of intraepithelial and stromal lymphomas compared to the normal prostate was studied.

The candidate has worked on morphological changes and deviations of predictive factors in breast cancer; on morphometric diagnostic possibilities for distinguishing neoplastic from inflammatory diseases of the stomach.

The study of predictive biomarkers of breast cancer in the natural course of the disease and therapeutic modulation may allow better knowledge of the biology of the disease with subsequent development of risk-stratification models.

## 2. Assessment of the scientific papers with contributions in the field of oral pathology

Dr. Bachurska together with the section of oral pathology at the Department of Periodontology, Faculty of Dental Medicine, MU-Plovdiv has participated in a study of

therapeutically associated histological changes after application of various photodynamic sources; in the same collaboration, histological and molecular changes in oral lichen planus, as well as diseases from the application of various photodynamic (laser) sources in connection with oral lichen planus were studied.

In the same interdisciplinary collaboration, Dr. Bachurska studied the frequency and morphological characteristics of premalignant lesions of the oral mucosa; the efficacy of non-invasive diagnostic methods compared with the "gold standard" - histological evaluation was established. Histological assessment of gingival changes in conventional and laser gingivectomy was performed with another department in the Faculty of Dental Medicine (prosthetic dentistry). A dynamic comparative morphological analysis of bone replacement substances in endodontic treatment was performed with the Department of Oral Surgery.

## 3. Assessment of the scientific papers with contributions in the field of experimental morphology

Dr. Bachurska together with the Clinic of Thoracic Surgery established an animal experimental model of chest trauma; the histological changes of cardiopulmonary injury in the blunt chest trauma in mice were studied.

## 4. Assessment of scientific papers with scientific and practical contributions

- study of morphological and immunohistochemical characteristics of colorectal cancer in correlation with KRAS and microsatellite status to improve the selection of the patients for subsequent genetic testing;
- the study of the histological changes after the application of a lasers in the oral cavity in order to establish an algorithm for their use in different nosological entities for a personalized therapeutic approach;
- the application of non-invasive methods in the diagnosis of premalignant lesions in the oral cavity in comparison with the biopsy examination in order to establish their efficiency for the implementation of a regional screening company;
- analysis of histological changes in the animal model of cardiopulmonary injury as a prognostic marker in patients with blunt chest trauma;
- the study of intraepithelial lymphocytes in category IV prostatitis as an evidence of the inflammatory nature of the disease, this study provides grading criteria as well as illustration an association between benign prostatic hyperplasia and the development of prostatitis.

# V. Impact (citations) of the candidate's publications in the national and foreign literature (publication image)

For the current contest Dr. Bachurska presented 10 citations found in the refereed journals. This is still a weak "publication image", which may be explained by the fact that the citations require some "technological time" for the published materials to be noticed and rated.

## VI. Complex qualitative assessment of teaching and professional activity

For the short experience she has, Dr. Bachurska has shown good professional, scientific and teaching qualities.

#### VII. Critical remarks and recommendations

I do not know the candidate personally and I cannot share specific impressions. As a recommendation, I advise Dr. Bachurska not to scatter his scientific interests in many directions, but to gradually go into the depths of complex morphological challenges.

## VIII. General assessment of the candidate's compliance according the required conditions and the obligatory quantitative scientific criteria

according to the Rules for holding academic positions at MU-Varna in Section IV "Holding an academic position "Associate Professor" (pp. 25-28) at MU-Varna and "Appendix №1" (pp. 35-36) of the regulations for the development of the academic staff of MU-Varna.

Dr. Svitlana Bachurska meets the general conditions such as completed higher medical education, acquired specialty in pathoanatomy and PhD degree in the scientific specialty Pathoanatomy and cytopathology, as well as the mandatory quantitative scientific criteria required for the academic position "Associate Professor".

With the legally required 400 points, she has 848.5 points, which is twice much as required.

#### IX. Conclusion

After the detailed analysis of the presented materials I made a complete assessment of the candidate in the contest for the academic position "Associate Professor" in the scientific specialty General and Clinical Pathology and I believe that the candidate: Dr. Svitlana Yurievna Bachurska, Ph.D. exceeds the requirements of Low of the development of academic staff and the Regulations of of MU-Varna and appropriate for holding the academic position of "Associate Professor" at the Medical University - Varna.

### X. Proposal for the position

According to the compliance of the candidate with the obligatory scientific criteria in qualitative and quantitative terms and according to the requirements of Low of the development of academic staff and the Regulation for holding the academic position "associate professor" of the rules of MU-Varna, I confidently give my positive assessment and propose the other members to vote for the award of academic position "Associate Professor" to Dr. Svitlana Yurievna Bachurska, MD. It can be proposed to the Scientific Council for selection and to the Academic Council of MU-Varna for approval of the academic position "Associate Professor" in the scientific specialty: General and Clinical Pathology.

16.7.2020

(Prof. D.Radoinova, MD, PhD)