STATEMENT

by Assoc. Prof. Ekaterina Boyanova Softova-Zlatarova, MD

Scientific specialty "General and Clinical Pathology" ; MC "City Lab" – LTD - Varna

Regarding: Competition for the academic position of **"Associate Professor"** in General and Clinical Pathology, in the field of higher education 7. "Health and Sports", professional field 7.1. "Medicine", and scientific specialty "General and Clinical Pathology", published in the State Gazette (№ 07 / 23.01.2024), for the needs of the Department of General and Clinical Pathology, Forensic Medicine and Deontology at Medical University - Varna and General and Clinical Pathology Clinic at University Multiprofessional Hospital For Active Treatment " Saint Marina" – JSC – Varna. According to a report with entry №102-692/29.02.2024 by Assoc. Prof. Deyan Jenkov, MD, decision based on protocol №18/11.03.2024 of the Faculty Council of the Faculty of Medicine at the Medical University of Varna and with order № P -109-100/22.03.2024 of the Rector of MU-Varna, I was elected an external member of the Scientific Jury. According to protocol №1 of the first meeting of the Scientific Jury, I was appointed to prepare a statement on the procedure for obtaining the academic position of "Associate Professor" in the specialty "General and Clinical pathology" with a candidate Hristo Popov, MD – Chief Asisstant Professor at the Department of General and Clinical Pathology, Forensic Medicine and Deontology, Medical University - Varna. The candidate has submitted both on paper and electronic media, all the necessary documents specified in the Regulation for the terms and conditions for acquiring a scientific degree and academic position at MU-Varna.

Analysis of the applicant's career profile:

Dr. Hristo Boychev Popov was born on September 19, 1986 in the town of Provadia. In 2005, he graduated from high school in Provadia, after which he was accepted as a student at MU-Varna. He graduated in 2011 with a master's degree in Medicine (reg. № 001495/22.11.2011, series №000986), issued by MU-Varna.

The professional development of Dr. Popov began on 03.10.2011, when he was appointed as a doctor at the General and Clinical Pathology Clinic at the University Hospital "St. Marina" - Varna. Later, on 14.02.2012, Dr. Popov was elected as an assistant professor in the Department of General and Clinical Pathology, Forensic Medicine and Deontology, MU – Varna. On 01.08.2012 he began his specialization in General and Clinical Pathology at the Univeristy Hospital "St. Marina" – Varna. Since 15.06.2021 he is Chief Assistant Professor at the Department of General and Clinical Pathology, Forensic Medicine and Deontology, MU – Varna. Between the years 2017 and 2022, Dr. Popov was Head of the "Tissue Bank Osteocenter-Bulgaria" JSC at UMHAT "St. Marina" - Varna.

Since 01.06.2017 Dr. Popov has a recognized specialty in "General and Clinical Pathology" (certificate with reg. №021011/07.07.2017, series №3843, issued by Medical University "Prof. Dr. Paraskev Stoyanov"-Varna).

With order №P-109-213/06.11.2014 of the Rector of MU-Varna and a decision of the Faculty Council at the Faculty of Medicine, Dr. Popov was enrolled as a doctoral student in independent training for obtaining the educational and scientific degree "Doctor" at The Department of General and Clinical Pathology, Forensic Medicine and Deontology at Medical University of Varna. On 07.08.2020, he successfully defended his dissertation on the topic: "Prognostic and predictive morphological factors in urothelial carcinoma of the bladder" and obtained the educational and scientific degree "Doctor" in the scientific specialty General and Clinical pathology with diploma №395/29.12.2020 .

Dr. Popov has a number of certificates for participation in individual trainings and courses, held at home and abroad, to improve his qualifications on various topics in the field of medicine, including dermatopathology, brain tumors, gynecological and pediatric pathology, etc.

In 2022, he participated in scientific-practical seminars related to: Immunochistochemical assessment of PD-L1 expression in non-small cell lung carcinoma, and ALK reporting course, and in training programs related to donation at "Osteocenter ".

During the period 2012-2013, he participated in the qualification courses "Pedagogical foundations of academic teaching" and "Pedagogical qualification of trainers from medical institutions". In 2023, he received a certificate for the acquisition of pedagogical competence - first level. Among the diplomas and certificates received by Dr. Popov for participation in scientific events, those related to the professional qualification for Highly Specialized Activities, stand out: Nephropathology and morphology of renal transplantology - 2022; Participation Certificate - Masterclass for Transplant specialist, 30.04.-30.05.2023, Bucharest-Romania; Certificate for training in immunohistochemistry for working with the Autosteiner Link 48 System, 2015, etc. Dr. Popov has an extremely large amount of participations in a number of seminars and courses related to renal pathology (listed in appendix №18); holds certificates for two individual trainings at MMA Sofia on the following topics: "Morphology and diagnosis of kidney diseases" - 2014, and "Nephropathology" - 2015, and a certificate for participation in the European School of Pathology in may 2018 on the topic "Diseases of the urinary system and the male genital tract".

On 07.08.2020, he successfully defended his dissertation on the topic: "Prognostic and predictive morphological factors in urothelial carcinoma of the bladder" and obtained the educational and scientific degree "Doctor" in the scientific specialty General and Clinical pathology with diploma №395/29.12.2020 .

Dr. Popov has published 31 scientific papers in bulgarian and foreign journals. In one of the publications he is the independent author, in 9 he is the first author in co-authorship; in 5 publications he is in second position, in 6 - in third position, and in 7 - after 4th position. Some of the publications are referenced in the world-famous databases Web of Science and Scopus. According to the Google Scholar platform, scientific works with the participation of Dr. Popov have been cited 10 times at the moment, and ten of the articles that the candidate presents in the competition for "Associate Professor" have a total IF of 17,751. Dr. Popov has participated in 14 national and international scientific forums with 19 appearances - 5 presentations in our country

and a report in Mexico-2019, and with 13 posters, 9 of which in Bulgaria and 4 (2018-2021) in Germany. The candidate speaks French and English at B2 level and has very good computer skills. He is a member of the Bulgarian Medical Association, the Bulgarian Society of Pathology and Renal Pathology Society. Dr. Popov has participated in 2 scientific research projects under the "Science" fund at the University of Varna:
1. In project №15019, on the topic: "Prognostic and predictive factors in carcinomas of the excretory system", with supervisor Prof. Dr. Petar Genev, MD
2. In project №21002: "Predictive and prognostic role of the immunohistochemical expression of apoptosis-inducing factor and RIPK3, a marker of necroptosis in renal cell carcinoma" with supervisor Prof. Dr. Maria Tsaneva, MD.

Scientometric data:

I. **Scientific research activity:** Dr. Hristo Popov has published a total of 31 scientific papers, including 28 submitted for participation in the competition, plus 3 publications for obtaining the educational and scientific degree "Doctor". To participate in the competition, he submitted:

- **Dissertation work** for obtaining the educational and scientific degree "Doctor" on the topic **"Prognostic and predictive morphological factors in urothelial carcinoma of the bladder"**;
- **Ten (10) scientific publications**, referenced and indexed in world-renowned databases with scientific information, equivalent to habilitation work, included in the academic reference in indicator B4 (B4.1-B4.10);
- **Seventeen (17) full-text papers** published in scientific journals and collections, other than those for obtaining the educational and scientific degree "Doctor", included in indicators G7 and G8, 9 of which in foreign scientific publications, referenced and indexed in world-renowned scientific databases (Web of Science), and 8 in unreferenced journals with scientific review;
- **One full-text publication** in scientific journals and collections, outside the mandatory ones to meet the minimum requirements for the academic position of "Associate Professor", evaluated with 5 points;
- **Three full-text publications** in scientific journals and collections in connection with obtaining of the educational and scientific degree "Doctor", one of which is in a foreign scientific journal, referenced and indexed in world-renowned database with scientific information (Web of Science).
- **The dissertation work** for obtaining the educational and scientific degree "Doctor" on the topic ***"Prognostic and predictive morphological factors in urothelial carcinoma of the bladder"*** in 2020 was evaluated by the Scientific Jury. This means that **criterion A of the minimum requirements for occupying the academic position "Associate Professor " according to the LDASRB is fulfilled.**

The total amount of points from the **10 publications** presented, equivalent to habilitation work, is **102.57** (with a required minimum of **100 points**) - **i.e. Criterion B of the minimum**

requirements for the academic position "Associate Professor" according to LDASRB is fulfilled.

The total amount of points from the indicators D.7 and D.8 of the presented 17 **full-text** publications in scientific journals and collections, other than those for obtaining the educational and scientific degree "Doctor" is **237.95** (with a required minimum of 200 points). **166.67** points are from published in referenced and **71.28** points are from articles published in unreferenced journals and collecions with scientific review. **Criterion D of the minimum scientometric requirements for the academic position of "Associate Professor" is fulfilled.**

To participate in the competition, Dr. Popov submitted 10 of all his citations in foreign scientific publications, referenced and indexed in world-famous database with scientific information (Web of Science and Scopus), which according to indicators **E10-12** bring him a total of 150 points, with which **criterion E is fulfilled.**

Dr. Popov's scientific research activities and contributions from scientific works are in the following main areas:

1. Alternative molecular mechanisms of cell death and cell survival: scientific publications № C4.2; № C4.5; № D7.4
2. Urothelial carcinoma: publications № C4.6; D7.3; D7.5; D7.6; D7.8; D8.7;
3. Rarely diagnosed diseases: № C4.1; C4.3; C4.4; C4.8; C4.9; C4.10; D7.1; D7.2; D7.7; D7.9; D8.1; D8.3; D8.4; D8.5; D8.6
4. Infectious diseases: № C4.7; D8.8;
5. Experimental morphology: № D8.2

From this reference it becomes evident that the candidate has a wide range of scientific and diagnostic interests and the rare ability to work in a team, dominating in a significant part of the featured publications. The various morphological and IHC-methods of research used by Dr. Popov show that he is a very well methodically prepared specialist who, in addition to the ability to interpret the obtained results, definitely shows a desire to build models and profiles that would serve in the implementation of the diagnostic process in routine practice.

We present the main contributions in the scientific works of Dr. Popov as: **1. Contributions related to the dissertation work, and 2. Contributions resulting from the publications included for participation in the "Associate Professor" competition.**

1. Contributions of the dissertation work are: A. Three contributions of original nature, which include: 1. Morphological assessment of a large group of urothelial carcinomas, interpolated according to the propensity for local recurrence; 2. A relationship between the density of TATE, mast cells and the occurrence of local recurrence has been proven. 3. An exemplary morphological profile of recurrent urothelial carcinoma is proposed, including: primary and additional criteria.

B. Contributions of a confirmatory nature, referring to: 1. The relationship between the stage (pT), high grade differentiation and the earlier occurrence of local recurrence was confirmed; 2. The significance of FGF2 expression and stage (pT) invasiveness was confirmed;

C. Scientific - applied contributions: 1. Positive expression of CK20 cannot be used as a definitive histogenetic marker; 2. The relationship between the expression of CK20 and low grade differentiation was confirmed; 3. GATA3 expression by urothelial tumors is associated with the occurrence of local recurrence, but cannot be a definitive histogenetic marker of the urothelial origin of the tumor.

The main contributions in the scientific works of Dr. Popov submitted for participation in the competition include:

Contributions of a scientific - original nature

C.4.6. In a conducted study, the existing relationship between TAMS and the clinical-morphological characteristics of urothelial carcinoma (UC) in stage pTa and pT1 was traced. A morphological evaluation of materials from 163 patients, divided into two groups - 95 patients with non-recurrent and 68 patients with recurrent UC; a positive (+) correlation was found between the amount of TAMS in the tumor stroma and the occurrence of local recurrence, without statistical significance for the time of recurrence.

C4.1. A rare case of BEN, a form of interstitial nephritis developing only in certain regions of the Balkan countries, is presented in a 42-year-old man; the macroscopic and histological changes in the structure of the kidneys are described in detail, and in addition to the severe glomerular and vascular findings, urothelial papillomas in the pelvis with signs of atypical urothelial hyperplasia were also found. The authors state that BEN is only a geographic variant of interstitial nephritis caused by the action of aristolocholic acid. The contribution of the publication is of a scientific and applied nature.

C.4.2. 43 patients with CRC and inoperable liver metastases were studied, and SUVmax levels and Beclin-1 expression related to the survival of damaged cells in degeneration and tumors were evaluated. SUV max for liver metastases before treatment was found to be unable to predict progression-free survival, but was statistically significant for worse overall survival. The conclusions drawn are confirmed by the expression of Beclin 1, low values of which have the same significance and predictive value. The contribution of the publication is of a scientific and applied nature.

C.4.3. A rare case of primary melanoma with ano-rectal localization (1.7 per million) having a very aggressive course of development is presented. It is noted that 5-year survival is < 20%, with 67% of cases having distant metastases. The authors concluded that there is a correlation between study findings and tumor behavior and prognosis; the contribution in the presented publication is of a scientific-applied nature.

C.4.4. The presented case has a significant scientific and applied contribution and an unconditional categorical example of the consequences occurring as a result of undiagnosed and untreated gestational diabetes, which developed and progressed with severe diabetic fetopathy, a developed morphological picture of pronounced steatosis and multiple cysts in the pancreas. What is special about this case is that not only hyperplasia of the islets of Langerhans is observed, but also the development of amyloidosis with amyloid deposition in the cells, a

probable result of fetal hyperglycemia. Established amyloidosis leads to expansion of the diagnostic criteria and allows a comprehensive interpretation of cases with type 1 diabetes.
C.4.5. Currently, the continuous search for new prognostic and predictive markers, which are crucial for improving the results of ongoing antitumor treatment, is particularly relevant in oncology practice. A promising marker in this direction is RIPK3, which plays an important role in necroptosis. In a group of 74 patients with CRC in the metastatic stage, treated with first-line chemotherapy, an IHC study with the indicated marker was performed. High levels of RIPK3 expression were found to be associated with a longer median overall survival period of 29.3 months, compared to low expression cases where median survival was 18.5 months. Patients with high expression of the marker have a lower risk of developing disease progression. The need for further studies concerning RIPK3 expression with a view to its evaluation in the primary tumor in patients with metastatic CRC and the application of RIPK3 as a promising prognostic and predictive marker is indicated. The contribution in the publication is undoubtedly of high scientific and practical value.
C-4.7. An autopsy case of an 18-year-old woman with a history of cerebral paralysis with recurrent respiratory infections and newly diagnosed COVID-19 is presented. In addition to the histological finding observed in the lungs, the presence of groups of large cells with foamy cytoplasm was found in the lung, spleen and CNS. The conclusion is that it is an unrecognized neurolipidosis, clinically and morphologically consistent with Niemann-Pick type 2 disease, with developing interstitial lung disease and recurrent respiratory infections aggravating the underlying disease. The contribution is of a scientific and applied nature.
C-4.8. A case of a patient with lung lesions clinically and radiologically diagnosed as lung carcinoma is presented. No biopsy was performed due to patient refusal. The autopsy revealed lesions in the lung, liver and brain, as well as multiple polyps in the colon, two of which showed signs of invasion. In conclusion, it concerns benign polyps in the colon mucosa and advanced CRC with multiple metastases. The special thing in this case is that lung metastases, dominating the clinical picture, were assessed as a primary neoplastic tumor process. The contribution of the publication is essential for diagnostic practice.
C-4.9. An interesting case of a 62-year-old man with evidence of gout since 20 years is presented; presence of a nasal "hump" from a growth in the nose over the last 3 years, with nasal obstruction and facial deformity. Histological examination shows a picture of gout (gouty tophi) - with deposited urate crystals and granulomatous inflammation. Characteristic of the presented case is the rare manifestation of the disease in terms of the localization of the finding in an atypical area (nose).
C-4.10. The subject of the publication are two pediatric cases - of a 1-year-old girl and a 6-month-old girl, with classic changes in the lungs, liver, pancreas and small intestine, with clinically confirmed cystic fibrosis. Despite the normal macroscopic appearance of the kidneys, the histological examination revealed severe changes, expressed in the presence of dense matter in the lumens of the distal tubules, in some of them - with signs of dystrophic calcinosis. Since the histological renal changes are not sufficiently well described in the literature, the authors

accept them as the primary histological feature in the kidney in patients with cystic fibrosis; the contribution is of a scientific-practical nature.

II. Contributions to the abstracts of publications in indexed databases related to the academic position "Associate Professor":

D-7.1. A scientific-practical contribution is contained in the described case of a 78-year-old patient with a large tumor mass in the left kidney; non-Hodgkin's lymphoma originating from the renal capsule and soft tissue infiltration is histologically proven; improvement after treatment; after two negative bone marrow biopsies, the patient is alive and without disease recurrence.
D-7.2. A contribution of a scientific-practical nature is contained in the presented two cases of differential diagnosis of spindle cell renal neoplasia; In the first patient - a 42-year-old man, due to the finding of the histological and IHC- examination with positive expression of caldesmon, vimentin and GMA, and negative expression of cytokeratin 7, S-100protein(-); Melan A (-) etc is assumed to be primary renal leiomyosarcoma; 2. In the second patient - a 53-year-old man - IHC found positive expression of CK AE1/AE3, focal expression of EMA and CD10 - on this basis, the tumor was interpreted as spindle cell renal carcinoma.
D-7.3. A case of non-muscle invasive adenocarcinoma of the urinary bladder is presented in a 40-year-old man with a history of cystitis cystica et glandularis and with submucosal proliferation of atypical glandular structures; treated with intravesical TBC vaccine; after treatment there is no evidence of residual tumor, but cystitis cystica et glandularis persist. One year after the diagnosis, the patient is under active observation, without a relapse; the contribution of the publication is of a scientific-applied nature.
D-7.4. 54 patients with metastatic CRC assigned to first-line 5-Fu-based chemotherapy with/without bevacizumab were followed. Expression levels of the two tumor biomarkers VEGFR-2 and Neuropilin-1 were assessed in materials from all patients.
Patients with low expression of neuropilin-1 were found to have a statistically significant prolongation of PFS when compared to those with high expression of the marker. Patients with low neuropilin-1 seem to have a greater effect of treatment with bevacizumab in terms of PFS than patients with high neuropilin-1. The addition of bevacizumab to 5-Fu-based chemotherapy is thought to improve PFS in patients with metastatic CRC. In conclusion, tumor neuropilin-1 expression is a potential biomarker for predicting clinical outcome in patients with metastatic CRC treated with first-line chemotherapy plus bevacizumab. **Scientific - applied contribution.**
D-7.5. A contribution of an **original scientific-applied nature** is contained in the publication dedicated to the evaluation of FGF-2 expression in 163 patients in the early stage of UC of the bladder (pT1 and pTa) regarding their invasive potential. Based on the obtained results of the study of the interaction between the tumor and the ECM regarding the expression of FGF2, it is noted that the high levels of cytoplasmic expression of FGF-2 from the tumor stroma are associated with a low potential of UC for submucosal infiltration and a prerequisite for reduced risk of local recurrence. Low levels or absent expression of FGF-2 are observed in high grade

invasive UC. However, it is unclear how these interactions affect the metastatic potential of tumors.

D-7.6. There is also a contribution of an original scientific-applied nature in the publication dedicated to the study and evaluation of the role played by the expression of CK20 in non-invasive UC of the bladder, as well as its diagnostic-predictive role in staging and tumor recurrence. Evaluation of CK20 expression in relation to differentiation and tumor stage showed a strong statistical correlation between them.

High-grade tumors show weak to moderate expression of CK20, and low-grade tumors show intense expression. This gives reason to accept CK20 as a reliable diagnostic marker in cases where it is used together with other markers.

D-7.7. A rare case of a slowly enlarging painless mass in the middle third of the right lateral lingual border in a 60-year-old man is presented. Histologically - pleiomorphic spindled cells with bizarre nuclei and high mitotic activity; cells form interlocking bundles; IHC- the research carried out gives reason to assume that it is a pleiomorphic leiomyosarcoma of the tongue. The publication has a **scientific-applied contribution.**

D-7.8. An original-applied contribution is contained in the publication dedicated to determining the levels of nuclear expression of GATA-3 in recurrent and non-recurrent UC developed in 163 patients, finding that high expression levels of the marker are reduced or absent in non-recurrent carcinomas, while in recurrent /high grade/ the expression is intense. High levels of nuclear expression indicate the possibility of a higher risk of local recurrence. The possibility that GATA-3 expression is also associated with epithelial-mesenchymal transformation, suggesting a higher propensity for UC invasion and metastasis, is discussed; this mechanism could also explain the role of GATA-3 in the occurrence of early relapse.

D-7-9. Schoenlein-Henoch's purpura is the most common vasculitis in childhood, but in this particular case it concerns a disease in a 60-year-old patient, with multiple rash units on the lower extremities, including bullae; presence of CKD. Eight months later, the patient dies from the complications. Although rare, the bullous form can be considered a more aggressive form of the disease. The contribution of the published article is of a scientific-applied nature.

III. Abstracts of Publications in Non-Indexed Databases Related to the academic position of "Associate Professor". The contributions in all presented works from this group are of a scientific-applied nature.

D-8. 1. A case of a rarely encountered in medical practice combination of hypersensitivity to gluten, on the one hand, and sarcoidosis, on the other, in a 54-year-old woman with a facial rash, round erythematous plaques 1-3.0 cm; suffered from dermatitis herpetiformis and persistent intrahepatic cholestasis; strong (+) reaction of IgA-anti-tissue transglutaminase antibodies (celiac disease+); in the skin - non-caseating granulomas in the dermis; case supports the hypothesis of common immune pathogenic factors in gluten hypersensitivity disease and sarcoidosis.

D-8.2. An assessment of the impact of vit. K on changes in the liver and pancreas of rats with experimentally induced metabolic syndrome. The study showed the development of pronounced

steatosis in all experimental groups. In the two groups with vit.K retreatment, the changes paradoxically deepen their character - the addition of vit.K to a high-fat, high-fructose diet enhances the effects of the vitamin. The described paradoxical reaction during the retreatment with vit. K points to possible omissions regarding the dosing of vit. K, or the intervention of an additional factor predisposing to this paradoxical manifestation of changes in the liver and pancreas of experimental animals.

D-8.3. Of interest is the described case of combination between pheochromocytoma and MEST in a 54-year-old woman with laparotomy due to evidence of pheochromocytoma. In addition, another tumor was found in the left kidney, represented by a dense, well-demarcated, partially cystic tumor mass in the renal pelvis, on section with multiple cysts and papillary protrusions on the inside. The cysts are lined by columnar and cuboidal epithelium; stroma - of ovarian type and eosinophilic foci resembling "white bodies" with calcification. It is believed to be a MEST - a rare mixed epithelial and stromal tumor, with about 200 cases of MEST in the renal pelvis described in the literature; usually develops in perimenopausal women as a partially cystic mass; its growth may be influenced by hormonones. The available literature lacks a description of a similar finding, representing a combination of pheochromocytoma and MEST.

D-8.4. 8 cases of rare hereditary disorder of the adhesion proteins between cardiomyocytes, associated with ventricular arrhythmias and sudden cardiac death were proven at autopsy. The most significant histological finding is the replacement of cardiomyocytes by adipose tissue, with/or without added fibrous tissue. The results of the study show that intramyocardial adipocytes and cardiomyocytes in ARVD express NGF/TrkA NT-3/TrkC, suggesting that they may play an essential role in the development of myocardial electrical instability. NGF is thought to exert an arrhythmogenic effect that leads to sudden death.

D-8.5. The need to grow the premature infant in a high-oxygen environment against the background of tissue hypoxia leads to the proliferation of blood vessels in the retina, which later sprout into the posterior chamber. As the respiratory system matures, the vessels degenerate and are replaced by fibrous tissue, a fact leading to numerous complications. In order to detect early vascular changes in the retina, the visual analyzer of a pediatric autopsy case with early changes associated with retinopathy of prematurity and a control pediatric autopsy without clinical evidence of pathological process in the retina were examined. The two cases were aged 3 months. In the patient with clinical signs of retrolental fibroplasia, abundant proliferation of blood vessels and disruption of its architectonics was observed in the outer layers of the retina; the second patient was without clinical data, with conventional retinal morphology without vascular proliferation. It is possible that with good treatment measures - control of the oxygen environment and maximally rapid rehabilitation of the lung, the changes will regress without pathological progression. Emphasis is placed on the fact that some of the changes may be of genetic etiology and represent a potential risk for other family members.

D-8.6. A rare case of pleomorphic adenoma of an eyelid, with the even rarer origin from the exocrine glands of Mol, is described. The finding was established in a 66-year-old woman with

vision difficulties due to the formed tumor mass. The histological aspects, diagnostic and treatment approaches of the tumor at this location are discussed.
D-8.7. The article reviews markers that could be relevant and help in the differentiation of UC. The markers CK20, CD10, and GATA-3, relatively new markers for urothelial differentiation, are the subject of discussion. As a reliable marker discussed in the literature, gp130 is also indicated, which can be predictive and prognostic in urothelial carcinoma as well. The contribution in the article is of a theoretical-practical nature.
D-8.8. For the first time in our country, a study was carried out on autopsy cases with an emphasis on the histological changes developing in the lungs during COVID-19 infection, with an analysis of the morphological changes, determining the dynamics of early and late manifestations in the organs and the likelihood of long-term and severe complications in patients with post-covid syndrome. Although it initially emerged as a respiratory disease, SARS-CoV-2 has emerged as a multisystem pathogen. The severity of changes in the respiratory system is determined in the first place by the developing diffuse alveolar damage, and secondly, with no less importance – by the development of endotheliitis, with damage to the endothelial cells of blood vessels of medium and large caliber vessels and the possibility of development of thrombosis/thromboembolism in the pulmonary circulation. It is important to note that the disease proceeds not only acutely, but also with chronicity, therefore it is crucial to direct attention to its histopathological aspects in order to better study the impact of the virus on the body and to identify possible future complications after this infection.
The contribution in the publication is of an important scientific-theoretical and applied nature.

IV. 1. Abstracts of publications beyond the minimum scientometric requirements

One of the systems affected by the COVID-19 virus is the CNS, and the changes developing in it are characterized by a variety of morphological manifestations - inflammation, changes in the blood-vascular brain barrier, degenerative cell changes, etc.
A chapter of the publication describes the main neuropathological aspects of SARS-Co-V-2 based on the current evidence in the scientific literature, and proposes the term COVER-COVID-associated encephalopathy to bring together the undisputed effects of the infection on the morphology and function of the nervous system.

II. Teaching activity:

Dr. Popov is Chief Assistant Professor at the Department of General and Clinical Pathology, Forensic Medicine and Deontology at Medical University - Varna. According to the reference presented, his total teaching experience as of 31.01.2024. is 11 years 11 months. and 16 days. He actively participates in the training of bulgarian students at: Faculty of Medicine, discipline "General Pathology", BLE - lectures and seminars; discipline "Clinical Pathology" BLE; participation in the training of specializing doctors and in thematic courses. Since 2013, Dr. Popov has been the course leader of the third course - BLE "Medicine".
His academic workload by years is as follows:

- in the academic year 2018/2019, the total workload is 254 hours; - in the academic year 2019/2020 - 236 hours; in the academic year 2020/2021 - 232 hours; in the academic year 2021/2022 - 302 hours and in the academic year 2022/2023 - 312 hours. This shows that his academic workload exceeds the needed 220 hours for the positions he held.

III. Therapeutic and diagnostic activity

As of 07.02.2024, the professional work experience of Dr. Popov is 12 (twelve) years, 4 (four) months and 4 (four) days. As an assistant professor, and later - as a doctor-chief assistant professor at the General and Clinical Pathology Clinic of UMHAT "St. Marina" - Varna, he takes an active part in the overall therapeutic and diagnostic process, including autopsy work, diagnosis of histological and cytological biopsies.

Dr. Popov has a large contribution in carrying out highly specialized researches on stomach carcinomas, non-small cell lung carcinoma, head and neck tumors, etc. He is actively involved in the immunofluorescent and light-microscopic evaluation of kidney, skin and muscle biopsies, as well as evaluation of kidney biopsies in transplanted patients. Dr. Popov participates in expert clinical-morphological meetings discussing patients with rare diseases (along with doctors from the Nephrology and Children's Clinics).

His professional interests are focused mainly on kidney diseases, the urogenital tract in men, and the possibilities of applying molecular pathology to help with the oncological diagnosis. I have known Dr. Popov since the beginning of his professional career and my impressions of him are excellent. He is a responsible young colleague, able to work in a team, with an interest in scientific activity and a continuous striving for improvement.

Conclusion:

Dr. Popov is a built and very well prepared pathologist, with extensive clinical and pedagogical experience. The scientometric indicators presented by the candidate, as well as the teaching workload reference, meet the criteria of LDASRB and the Regulations for the conditions and procedures for acquiring scientific degrees and holding academic positions at Medical University-Varna, as a requirement for obtaining the academic position of "Associate Professor". Bearing in mind these facts and based on my personal impressions, I believe that Dr. Popov has all the necessary qualities for occupying the academic position of "Associate Professor". For these reasons, I am voting positively and recommending to the esteemed Scientific Jury to award Dr. Hristo Boychev Popov, MD, the academic position of "Associate Professor".

23.05.2024 Signature:

Заличено на основание чл. 5, §1, б. „В“ от Регламент (ЕС) 2016/679

Varna Assoc. Prof. Dr Ekaterina Boyanova Softova-Zlatarova, MD