REVIEW

From

Prof. Dr. Yavor Petkov Enchev, MD, PhD

Head of the Department of Neurosurgery and ENT Diseases, Medical University of Varna,

Head of Clinic of Neurosurgery, University Hospital "St. Marina", Varna

Member of the Scientific Jury according to Order No. P-109-141/23.02.2023. of the Rector of Medical University - Varna

Subject. 7. 1. Neurosurgery", Department of Neurosurgery and ENT Diseases, Faculty of Medicine and 0,5 full-time position for the Clinic of Neurosurgery at the University Hospital "St. Marina" EAD - Varna.

Regulatory requirements

- Section III Occupation of the Academic Position "Associate Professor" of Chapter Three - Occupation of Academic Positions at MU- Varna of the Regulations for the Development of Academic Staff at MU "Prof. D-r. Stoyanov" - Varna
- 2. Annex No. 1 of the Regulations for the Development of Academic Staff at MU "Prof. D-r. Stoyanov Varna
- 3. Order of the Rector of MU- Varna № R-109-141/23.02.2023 for appointment of the scientific jury
- 4. Protocol No. 1 of the first meeting of the Scientific Jury.

One set of documents have been submitted for participation in the competition by Dr. Bogomil Petkov Iliev, MD. PhD - neurosurgeon at the Clinic of Neurosurgery of the University Hospital "St. 1. He is a senior assistant at the Department of Neurosurgery and ENT Diseases at the Medical University - Varna.

The candidate has submitted all the necessary documents for participation in the competition, in compliance with the requirements of the Academic Staff Development Act in the Republic of Bulgaria, the Regulations for its application and the Regulations for the Development of the Academic Staff of Medical University - Varna.

According to Protocol No.1 of the first meeting of the Scientific Jury I am appointed to prepare a review on the procedure for the academic position of Associate Professor.

Biographical data of the applicant

Dr. Bogomil Iliev obtained his Master's degree in Medicine at the Medical University of Varna in 2010. In 2012 Dr. Iliev upgraded his education and qualification with a second Master's degree in "Health Management" again at the Medical University of Varna. Since 2018 the candidate is a specialist in Neurosurgery.

Dr. Bogomil Iliev started his academic career in 2014 as an assistant and since 2018 he has been a head assistant at the Department of Neurosurgery and ENT Diseases at the Medical University of Varna. Since 2015 she has defended his dissertation on "Endoscope-assisted evacuation of intracerebral hematomas".

Courses and specializations, both at home and abroad, have further contributed to his professional development and his formation as a well-prepared and modern thinking professional, practitioner, teacher and researcher.

He is a member of professional and scientific Bulgarian and international organizations, including: the Bulgarian Society of Neurosurgery; the Bulgarian Medical Association; a member of AOSpine. Member of the Board of the Institute of Surgery of the Bulgarian Academy of Medicine.

He won a scholarship (Travel Grant) at the XV WFNS, World Congress of Neurosurgery, Seoul, Korea-2013 on the topic of his thesis with a presentation entitled: "Early endoscope-assisted evacuation of intracerebral haematomas - is this the new gold standard?".

In 2016, he was awarded the prestigious Young Scientist Award during the 21st Congress of Euroacademia Multidisciplinaria Neurotraumatologica (EMN) in Novi Sad, Serbia, with the presentation "Endoscope-assisted evacuation of chronic subdural hematoma - 121 minimally invasive procedures".

General characteristics of the candidate's research and applied scientific activities

The publications and references submitted for the competition prove the high quality and international recognition of the candidate's scientific production. Principal as. Dr. Iliev applied for the competition with scientific creativity, covering and in some indicators exceeding the minimum scientific-metric requirements of MU-Varna.

A total of 32 scientific works - real publications were submitted for the competition, 31 of which (including a habilitation thesis) are included as evidence in the report on the fulfillment of the minimum requirements for holding the post of Associate Professor, according to the Academic Staff Development Act of the Republic of Bulgaria. One full-text publication is also submitted, outside the evidence for fulfilling the minimum requirements for the post of Associate Professor. In addition, the applicant provides information on 3 other full-text publications that are not subject to peer review for this competition, related to the award of the PhD. He has also provided a list of 7 full-text publications of the scientific works not subject to peer review for the present competition and used for the appointment of the post of Assistant Professor.

The scientific papers submitted for the competition were published in the period 2012 - 2022 and have the following distribution by type:

1 monographic (habilitation) thesis - "Contemporary concepts and surgical trends in chronic subdural hematoma" 2022.;

14 pcs. Publications and reports published in scientific journals, refereed and indexed in world-known databases with scientific information.

16 pcs. Publications and papers published in non-refereed peer-reviewed journals or in edited collective volumes

1 pc. Full-text publication in scientific journals and collections, beyond the minimum science-metric requirements for the position of Associate Professor All publications are correctly described and attached in full in electronic format

to the competition materials.

The monograph "Contemporary Conceptions and Operative Trends in Chronic Subdural Hematoma" by Dr. Bogomil Petkov Iliev, is a detailed study for the purpose of neurosurgical practice. A contemporary meta-analysis of the world literature is made and at the same time the clinical course, diagnostics and surgical treatment of 149 patients with CSDH operated in the Clinic of Neurosurgery of the University Hospital "St. Marina", are reviewed. Varna over a 10-year period. The author was involved in the diagnosis and surgical treatment of most of the patients in the presented series. The monograph details the historical aspects of cSDH, their epidemiology, etiology, pathogenesis and pathophysiology, methods of diagnosis of cSDH, their clinical course, options for conservative treatment, the most commonly used surgical approaches with an analysis of the advantages and disadvantages of the techniques used, specific postoperative care, possible complications and outlines future research directions. The book is richly illustrated with photographs and imaging studies of patients, giving a rich insight into the nature of cSDH and the effect of neurosurgical treatment.

The presented **scientific papers** have been published in renowned scientific journals abroad and in Bulgaria, such as Journal of Neurological Surgery, Medical Oncology, J IMAV, ScriptaScientifica Medica, Bulgarian Neurosurgery, Varna Medical Forum, Scripta Scientifica Vox Studentium, Heart-Lung (Varna), International Bulletin of Otorhinolaryngology, Practical Pediatrics, etc.

The scientific research activity and scientific contributions of Asst. Dr. Iliev are in the field of the scientific specialty of the announced competition. They can be grouped in the following thematic areas:

1. Neuroendoscopy in:

- A. Operative treatment of intracerebral hematomas
- в. Operative treatment of cSDH

2.Spinal surgery

- A. Use of intraoperative ultrasound
- B. Treatment of spondylodiscitis and luetic spinal pachymeningitis
- c. Minimally invasive techniques for osteoporotic fractures
- D. Operative treatment of rare spinal tumors

2. Cranioplasty

- A. In trauma
- в. In tumor process

4.Oncology

- A. Angiogenesis in brain tumors
- B. Cell biology in glioblastomas
- c. Endonasal transsphenoidal surgery
- D. Treatment of primary malignant brain tumors
- 5. Safety measures.
- 6. Other
 - A Endovascular treatment
 - c. PET/CT imaging in brain lipomas
 - D. Laminar necrosis after subarachnoid hemorrhage
 - E. Radiosurgery
 - F. Decompressive craniectomy for malignant cerebral edema secondary to ischemic stroke.

The candidate's scientific output demonstrates competence in the areas under study and reflects his/her professional training, practical experience, interests and dedication to research.

As a summarizing characteristic of the scientific works I emphasize the topicality of the considered topic, innovative ideas, contribution and the potential for practical applicability of the scientific results. The scientific contributions are predominantly original in nature- with cognitive and practical-applied significance at national and international level.

Evidence is presented for the high quality of the publications and their reflection in the Bulgarian and international scientific literature. For the current competition the candidate has submitted a reference from the library of MU-Varna for 4 citations, which are in scientific journals, refereed and indexed in world-renowned databases with

scientific information, which is indicative of the relevance of the topic under consideration and the recognition of the candidate by the scientific community.

His active participation in scientific forums contributes to the good visibility of Dr. Iliev's scientific work. He has provided information and evidence for 54 presentations in scientific forums, 39 of them international.

Undoubted confirmation of international recognition and quality of the scientific works and scientific production of Asst. Dr. Iliev is that he has 89 citations, h-index 3 and the presence of *i10-index* 1, according to Google Scholar.

A reference issued to confirm that Dr. Bogomil Iliev has registered active scientific profiles in ORCID, Google Scholar and Research Gate.

Information is provided on Dr. Iliev's participation in projects aimed at actively supporting the scientific activities of undergraduate and postgraduate students, namely:

- 1. In the period 2016-2017 participation in the Project BG05M20P001-2.002-0001 of the Ministry of Education and Science "Student Practices Phase 1" funded by OP NOIR, as a mentor in the specialty of neurosurgery.
- 2. 2018 Participation in Project BG05M20P001-2.002-0001 of the Ministry of

Education and Science

"Student Practices - Phase 1" funded by OP NOIR, as an academic mentor in the specialty of neurosurgery.

Evaluation of the candidate's teaching activity

Dr. Bogomil Iliev has 12 years of experience in the specialty and 9 years of teaching experience (4 years as an assistant and 5 years as a senior assistant) in the Department of Neurosurgery and ENT Diseases at the Medical University of Varna, which fully meets the regulatory requirements for the *academic position of Associate Professor*.

His teaching load is within the norms (on average 100 classroom hours per semester over the last 5 years). The candidate's teaching activity is within the scope of his professional training and research interests. He participates in teaching the course "Neurosurgery" to the students of the specialty "Medicine"; the course "General and Operative Surgery" to the students of the specialties "Dentistry", "Nurse", "Midwife", "X-Ray Laboratory Technician", "Medical Cosmetologist", "Plastic (Aesthetic)

Surgery", "Rehabilitation Therapist", "Public Health Inspector"; and "Neurobiology". He actively participates in the development and updating of the teaching documentation of these disciplines (curricula, etc.), as well as in the preparation of teaching materials for them.

The candidate has undergone a large number of specialized continuing education courses, enhancing his qualifications in the specialty, both at the Medical University - Varna and internationally.

Operational activity

From the presented report on Dr. Iliev's surgical activity it is evident that his average annual surgical activity for the last three years is over 450 surgeries per year, of which over 50% are in the field of major and very major surgery, according to the current standards of neurosurgery.

CONCLUSION

In conclusion, the scientific works and evidence material of Dr. Bogomil Iliev submitted to me for review for his participation in the competition for the academic position of Associate Professor are fully sufficient in volume and exceed the regulatory requirements of the Regulations for the Development of Academic Staff at MU "Prof. D-r. Stoyanov-Varna.

Analyzing all the information presented by Dr. Iliev, I am convinced that he is an accomplished neurosurgeon, scientist and teacher with diverse scientific pursuits in the field of neurosurgery. Dr. Iliev actively participates in a number of neurosurgical events, such as conferences and congresses, which is evident from the documents submitted in this competition. I have known and worked with Dr. Iliev for about 13 years and I have excellent impressions of his personality and his work as a neurosurgeon and I highly appreciate the results he has achieved.

All of the above gives me the full inner conviction to vote positively and to invite the members of the esteemed scientific jury to vote positively for the acquisition of the academic position "ASSOCIATE PROFESSOR" by Dr. Bogomil Petkov Iliev in the field of higher education 7. Health and Sport, professional field 7. 1. Medicine and scientific specialty "Neurosurgery"- one 0,5 full-time position for the Training Sector "Neurosurgery", Department "Neurosurgery and ENT Diseases", Faculty "Medicine" and 0,5 full-time position for the Clinic "Neurosurgery" at the University Hospital "Sveta Marina" EAD - Varna.

18.04.2023г Varna Prof. Dr. Yavor Enchev