

To The Chairman of the Scientific Jury, appointed by Order No. RL 265 of 23.07.2025 of the Rector of the Bulgarian State University "Prof. Dr. Asen Zlatarov"

OPINION by Assoc. Prof. Dr. Nikolay Radoslavov Mirinchev, MD, Head of the Department "Anesthesiology, General Pedagogy, Surgery, Orthopedics, Traumatology, Urology, Neurosurgery, Emergency and Intensive Medicine".

Subject: Competition for the academic position of "Associate Professor" in the field of higher education 7. Health and Sports, professional field 7.1. Medicine, in the scientific specialty "Neurosurgery" for the needs of the Faculty of Medicine, promulgated in the "State Gazette", issue 42 of 23.05.2025.

By Order No. RD 265 of 23.07.2025 of the Rector of the BSU "Prof. Dr. Asen Zlatarov" and on the basis of the ZRASRB, PPZRASRB. as well as the Regulations on the terms and procedure for acquiring scientific degrees and occupying academic positions at the University "Prof. Dr. Asen Zlatarov" - Burgas, I was appointed a member of the scientific jury. At the first meeting of the jury, I was assigned to prepare a statement. One candidate was admitted to participate in the competition - Dr. Deyan Dimitrov Handzhiev, MD. The documents submitted by the candidate are in accordance with the current regulations in the country and the internal regulations of the university. The deadlines for conducting the procedure have been met. 1. Career and thematic development of the candidate Dr. Deyan Dimitrov Handzhiev, MD, was born on July 24, 1973. He graduated from the Medical University - Varna in 1999. In 2008, he acquired a specialty in Neurosurgery. He has worked consecutively at HEI- Dobrich, Central Medical Center- Dobrich, Multi-specialty Hospital- Dobrich- Neurosurgery Department, Neurosurgery Clinic at Multi-specialty Hospital "St. Anna"- Varna and University Hospital "St. Marina"- Varna. He speaks English and Russian. Dr. Handzhiev's postgraduate qualifications include numerous specialized trainings in the country and abroad, including: 2000- Emergency medical care under the PHARE Program; 2010-: Techniques for High-speed drill and electrical and pneumatic instrumentation of Medtronic USA 2011- Legal capacity to perform diagnostic and therapeutic activities under X-ray control 2012- Cranial neuroendoscopy- Istanbul, Turkey; 2012- Percutaneous nucleolysis and vertebroplasty – Striker USA-Bucharest, Romania; 2013- "Surgical and endovascular treatment of cerebral aneurysms and arterio – Venous Malformations"- Pirogov, Sofia; 2014- Course/Certificate- Dandy Bulgaria 2014- Percutaneous Techniques in Spinal Surgery- Alphatec SpineAnatomy, University- Vienna, Austria 2015- Percutaneous Laser Discectomy- National Institute of Neuroscience, Budapest, Hungary 2016- Spinal Surgery System- NEOphytos - Nicosia, Cyprus 2018- Minimally Invasive Spinal Surgery System - Neo Pedicle Screw System- NEO Medical, Switzerland - Koblenz, Germany 2. General characteristics of the candidate's scientific, applied and pedagogical activities: In 2013 – Master's Degree in Health Management. In 2015, Dr. Handzhiev defended a dissertation on the topic: "Angiogenesis in Glial Brain Tumors", with which he acquired educational and scientific degree "doctor". Dr. Handzhiev presents a total of 63 scientific papers for the competition, which can be grouped as follows:

habilitation paper of 10 equivalent publications according to the profile of the announced competition (according to the presented list - publications No. 1,2,3,4,,13,15,16,20,21,62). All publications are in the field of neuro-oncology and are in refereed journals, Three of the publications are in publications with an impact factor - total IF = 4.733. The remaining 53 publications after the defense of the doctoral dissertation are presented as follows: - 14 publications in refereed journals - 209 points. - 38 publications in non-refereed journals - 265 points. Dr. Handzhiev is the first author in 21 of the submitted publications, the second and subsequent author in 27 publications and the last author in 14 publications. Participated in one project: FOUNDATION OF MEDICAL SCIENCE 2004/2005 - Scientific direction: Neurosurgery. Topic: Angiogenesis in glial tumors. Degree of correlation between angiogenesis in glial tumors with plasma levels of VEGF and bFGF. 1st place project №15. Participated in a published university textbook: Textbook of Neurosurgery, ed. BAS "Prof. Marin Drinov" 2024. Chapter 57 - Craniocerebral trauma - basic concepts, classification according to clinical condition and imaging findings Chapter 58 - Craniocerebral trauma - epidemiology, biomechanics and pathophysiology Leads teaching activities as a Mentor on the project "Student Practices" of the Ministry of Education and Science. 3. Reflection of the candidate's scientific publications and contributions in our and foreign literature From the submitted reference from NACID: Total IF/SJR of publications and citations: 18.319 1. From publications: Total IF/SJR – 7.117 - Web of Science IF (2014-0.608/2.485, 2017- 1.640)- 4.733 - Scopus Q4 SJR (2014- 0.100/ 1.235/ 0.382, 2017- 0.667)- 2.384 2. From citations; ОБЩА IF/S.JR - 11.202 - Web of Science IF (2015-2.658, 2019-3.267, 2023-1.9)- 7.852 - Scopus SJR (2015-0.643, 2019-1.228, 2020- 0.221/ 0.195, 2021-0.229, 2022- 0.180, 2023- 0.654)- 3.35 h-index-3 (Google Scholar) The main ones

Thematic areas of his research work during this period can be summarized as follows: 1) Studies in the field of Neuro-oncology 2) Studies aimed at improving the surgical technique - Neuroendoscopy in cerebral hemorrhages 3) Studies on degenerative diseases of the spine. 4) Neurotraumatology 5) Oncological casuistry. 6) Organization of work in neurosurgery, assessment and quality control Overall, the scientific research of Dr. Deyan Handzhiev, MD shows active and critical clinical thinking and a desire for effective cooperation within interdisciplinary teams of surgeons, oncologists, gastroenterologists, pathologists and radiologists. The following summary can be made of the scientific-theoretical and scientific-practical contributions in his works: The dissertation on the topic "Angiogenesis in glial brain tumors" has a number of original and scientific-applied values: The largest number of patients in the country (96 cases) with surgical treatment was processed and analyzed. For the first time, the independent prognostic significance and influence of cerebrospinal fluid levels of VEGF on life expectancy was established. For the first time, a regression nonlinear mathematical model of the dependence between VEGF values and life expectancy measured in days was created and based on this, a formula was derived for determining the possible life expectancy in patients with glioblastoma multiforme. For the first time in Bulgaria, the growth factors VEGF and bFGF were studied in patients with brain tumors. For the first time in the country, a complex angiogenic analysis was performed, including plasma and cerebrospinal fluid assessment of VEGF and bFGF concentrations in three groups of brain tumors and healthy patients. For the

first time in the country, the concentrations of VEGF and bFGF in benign and malignant primary brain neoplasms are compared. For the first time in the country, the correlation between the expression of VEGF and bFGF in CSF and plasma and life expectancy is assessed. It was found that plasma levels of VEGF and bFGF do not provide information about the type, degree of malignancy of the neoplasm or life expectancy, due to the available blood-brain barrier. A targeted study was conducted to establish life expectancy. The high prognostic value of CSF expression of VEGF was determined as a possible marker for assessing life expectancy. Subsequent publications in the field of neuro-oncology and neuroimaging studies in journals with an impact factor expanded the scope of scientific interests and described rare clinical cases diagnosed and operated on with subsequent follow-up. In recent years, a number of publications in the field of neurotraumatology with a detailed description of the etiology and mechanism of injuries, the volume and type of surgical treatment, results and comparison of own experience with results from a global database. Published articles, based on own clinical experience, in the field of spinal infections, as well as vascular pathology of the brain with a comprehensive description of the diagnostic and treatment algorithm. 5. Scientometric publications contribute to increasing the international visibility of Bulgarian science. This comprehensive factual information can be properly used in smaller countries and institutional scientific managers. 4. Participation in examination committees and membership in professional organizations Member of the Bulgarian Medical Union, Bulgarian Society of Neurosurgery. 5. Fulfillment of the requirements for a minimum sum of points by groups of indicators for the various scientific degrees and academic positions Dr. Deyan Handzhiev, MD fulfills and exceeds the minimum national requirements (MNR) under Art. 2b, para. 5 of the Law on the State of the Republic of Bulgaria for holding the academic position of "Associate Professor" and the Regulations on the terms and procedure for acquiring scientific degrees and holding academic positions at the University "Prof. Dr. Asen Zlatarov" — Burgas 6. Conclusion Dr. Deyan Handzhiev is an excellent professional and surgeon, whose experience and authority are recognized by both patients and his colleagues. He has undisputed achievements in scientific and teaching activity, which place him at the forefront of the field of neurosurgery in our country. The candidate fully meets the criteria for acquiring the title of "Associate Professor". I vote positively for awarding the title of "Associate Professor" in the scientific specialty "Neurosurgery" to Dr. D. Handzhiev and I call on the esteemed members of the Scientific Jury to also vote.

Prepared by: Assoc. Prof. Dr. Nikolay Radoslavov Mirinchev, MD.