

OPINION

**by Prof. Dr. Hristo Bogdanov Zhelyazkov, DM – Medical University of Plovdiv,
external member of the scientific jury**

Regarding:

Procedure for occupying the academic position "Associate Professor" in the field of higher education 7. Healthcare and Sports, professional field 7.1. Medicine, scientific specialty 03.01.41. Neurosurgery, on the grounds of Article 4, paragraph 2 of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), Article 2, paragraph 2 of the Regulations for its implementation, and in accordance with the Regulations on the Terms and Procedure for Occupying Academic Positions at the University "Prof. Dr. Asen Zlatarov" – Burgas, for the needs of the Department of Anesthesiology, Obstetrics and Gynecology, Surgery, Orthopedics, Traumatology, Urology, Neurosurgery, Emergency and Intensive Care Medicine at the Faculty of Medicine of Burgas State University "Prof. Dr. Asen Zlatarov", announced in the State Gazette, issue No. 42 / 23.05.2025.

Candidate: Dr. Deyan Dimitrov Handzhiev, PhD

I. ANALYSIS OF THE CANDIDATE'S CAREER PROFILE

1. Biographical Data

Dr. Handzhiev was born on July 24, 1973. In 1999, he graduated in Medicine from the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna. He began working at the Emergency Medical Service – Dobrich. In 2000, he was appointed as a resident physician at the Department of Neurosurgery at MBAL – Dobrich. From 2000 to 2002, he worked as a resident physician in the Clinic of Neurosurgery at UMHAT "St. Anna" – Varna. From 2002 to 2012, he specialized in neurosurgery at the Clinic of Neurosurgery at UMHAT "St. Marina" – Varna, and in 2008 obtained

a specialty in Neurosurgery. From 2012 to 2015, he worked as a specialist neurosurgeon in the Clinic of Neurosurgery at UMHAT "St. Anna" – Varna.

He serves as a National Consultant in Neurosurgery for the regions of Shumen, Silistra, Targovishte, Isperih, Razgrad, and for MBAL "Kanev" – Ruse.

He has completed numerous specializations in Austria, Hungary, Turkey, Cyprus, Serbia, Romania, South Korea, the USA, and Germany.

Member of the Bulgarian Society of Neurosurgery.

He speaks English (C2 level) and Russian (C1 level).

In 2012, he was nominated in the "Best Doctors" campaign organized by Darik Radio and Gallup International as "Neurosurgeon of the Year 2012."

2. Academic Development

In 2013, Dr. Handzhiev obtained a degree in Health Management from the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna.

In 2015, after successfully defending his dissertation titled "Angiogenesis in Glial Brain Tumors," he received the educational and scientific degree PhD at the same university.

He has completed numerous specializations and qualification courses, including:

2000 – Emergency Medical Care (PHARE Program)

2010 – High-Speed Drill Techniques and Medtronic Electric/Pneumatic Instrumentation (USA)

2011 – Certification for 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 AV Malformations (Pirogov Hospital, Sofia)

2014 – Dandy Bulgaria Course/Certificate

2014 – Percutaneous Techniques in Spinal Surgery (Alphatec Spine Anatomy, University of Vienna, Austria)

2015 – Percutaneous Laser Discectomy (National Institute of Neurosciences, Budapest, Hungary)

2016 – Spinal Surgery System NEOphytos (Nicosia, Cyprus)

2018 – Minimally Invasive Spinal Surgery – Neo Pedicle Screw System (NEO Medical, Switzerland – Koblenz, Germany)

II. DESCRIPTION AND EVALUATION OF THE SCIENTIFIC WORKS

A total of 63 full-text publications have been presented.

For the competition for the academic position Associate Professor, according to Article 67 of the Regulations of Burgas State University “Prof. Dr. Asen Zlatarov,”

Dr. Handzhiev participates with a habilitation work consisting of 10 equivalent publications (Nos. 1, 2, 3, 4, 13, 15, 16, 20, 21, 62), all in the field of neuro-oncology, published in refereed journals, with a total of 164 points (indicator B.4).

Three of these publications are in journals with an impact factor (total IF = 4.733).

The remaining 53 publications after his PhD defense are as follows:

14 in refereed journals – 209 points

38 in non-refereed journals – 265 points

Total for indicators G.7 and G.8 – 474 points.

Dr. Handzhiev is:

First author in 21 publications, Co-author in 27, Senior author in 14.

He has participated in 35 scientific forums, including 7 international congresses.

His works have been cited 31 times, as follows:

20 citations in refereed international journals – 300 points

10 in non-refereed journals – 50 points

1 in a doctoral dissertation – 10 points

Total for citations (indicator D): 360 points

Total impact factor from citations – 7.852

He holds a specialty in Neurosurgery (since 2008) – 40 points (indicator E.15).

Participation in one scientific project:

Medical Science Fund 2004/2005 – Neurosurgery field.

Topic: Angiogenesis in Glial Tumors. Correlation between angiogenesis and plasma levels of VEGF and bFGF.

Project No. 15 – 1st place. (indicator E.16 – 15 points)

He is a co-author of a university textbook:

Textbook of Neurosurgery, BAS Publishing House “Prof. Marin Drinov”, 2024.

Chapter 57 – Cranial Trauma: Basic Concepts, Clinical and Imaging Classification

Chapter 58 – Cranial Trauma: Epidemiology, Biomechanics, and Pathophysiology

(indicator E.20 – 80 points)

Total for indicator E – 135 points.

Scientific Contributions

Dr. Handzhiev’s research includes theoretical and applied contributions in the following areas:

Neuro-oncology – The dissertation and 28 related publications analyze the largest Bulgarian cohort (96 patients) with surgically treated glial tumors.

For the first time in Bulgaria, the growth factors VEGF and bFGF were studied in patients with brain tumors, establishing the independent prognostic role of CSF VEGF levels on survival.

A predictive formula for survival in glioblastoma multiforme was derived.

His studies introduced complex angiogenic analyses (plasma and CSF VEGF/bFGF) across three tumor groups and healthy subjects.

Results were presented at the World Congress of Neurosurgery (2013, Seoul, South Korea) and multiple international forums in Serbia, Romania, and Greece.

Two papers were published in high-impact journals.

Additional studies address MRI diffusion/perfusion techniques and rare cases of spinal paraganglioma, osteochondroma, and leiomyosarcoma.

Neurotraumatology – Six publications cover spinal trauma with advanced surgical stabilization techniques, alongside extensive work on cranial trauma (51 publications) and textbook chapters.

Degenerative Spinal Diseases – Three publications demonstrate experience in decompression and fusion for lumbar stenosis and treatment of chronic low back pain.

Neuroendoscopy – Major contribution through participation in Bulgaria's leading team for neuroendoscopic evacuation of deep and thalamic intracerebral hematomas (14 publications).

Neurosurgical Quality Management – Contributor to the first Bulgarian neurosurgical checklists to prevent complications and errors; published works share outcomes and organizational experience from modern neurosurgical centers.

III. COMPREHENSIVE QUALITATIVE ASSESSMENT

Dr. Deyan Handzhiev has over 20 years of professional experience as a neurosurgeon.

He is recognized as a respected clinician and academic in both professional and public circles, particularly in the Varna and Dobrich regions.

He demonstrates broad competence across neurosurgical fields, supported by numerous certifications and specializations.

His additional qualification in Health Management further enhances his academic and organizational capacity.

Scientometric Evaluation:

Indicator Group	Points
A – Dissertation	50

B – Habilitation Work	164
G – Publications	474
D – Citations	360
E – Indicators 15, 16, 20	135
Total:	1183 points

Dr. Handzhiev significantly exceeds the required minimum of 450 points as per the Regulations of Burgas State University “Prof. Dr. Asen Zlatarov.”

IV. CONCLUSION

Based on the materials presented and in compliance with the Regulations of Burgas State University “Prof. Dr. Asen Zlatarov,”

I consider that the candidate’s personal qualities, scientific output, and academic preparation fully meet the quantitative and qualitative criteria for occupying the academic position “Associate Professor in Neurosurgery” at the Department of Anesthesiology, Obstetrics and Gynecology, Surgery, Orthopedics, Traumatology, Urology, Neurosurgery, Emergency and Intensive Care Medicine, Faculty of Medicine, Burgas State University “Prof. Dr. Asen Zlatarov.”

Therefore, I give a positive assessment and recommend that the esteemed scientific jury vote in favor of Dr. Deyan Dimitrov Handzhiev, PhD, for the position of Associate Professor of Neurosurgery.

26 September 2025

Prof. Dr. Hristo Zhelyazkov, DM