

OPINION

by Prof. Valentin Konstantinov Vasilev, DM

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– Burgas,

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Member of the scientific jury for the competition for the academic position “Associate
Professor” in the field of higher education 7. “Healthcare and Sports”, professional field 7.1.
“Medicine”, scientific specialty “Neurosurgery”, announced in State Gazette issue No. 42 of
May 23, 2025.

For the above-mentioned competition, documents have been submitted by one candidate —

Dr. Deyan Dimitrov Handzhiev, PhD.

The documents submitted by the candidate are in accordance with the requirements for
acquiring the academic position “Associate Professor” as set out in the Law on the Development
of the Academic Staff in the Republic of Bulgaria (ZRASRB), its Implementing Regulations, and
the Regulations on the Conditions and Procedures for Acquiring Scientific Degrees and Holding
Academic Positions at the University “Prof. Dr. Asen Zlatarov” – Burgas.

I find no omissions or irregularities in the submitted documentation.

Brief Biographical Data

Dr. Deyan Dimitrov Handzhiev graduated in Medicine from the Medical University
“Prof. Dr. Paraskev Stoyanov” – Varna in 1999. He subsequently worked at the Regional Health
Inspectorate – Dobrich, the Emergency Medical Center – Dobrich, and MBAL – Dobrich as a
resident physician in the Department of Neurosurgery. From 2000 he worked at the Clinic of
Neurosurgery at MBAL “St. Anna” – Varna, and from 2013 to 2015 at the Clinic of
Neurosurgery at UMHAT “St. Marina” – Varna. Since 2015 he has been a National Consultant in

Neurosurgery. He acquired his specialty in Neurosurgery in 2008 and his scientific degree “Doctor” in 2015, after defending his dissertation titled “Angiogenesis in Glial Brain Tumors”.

In 2013 he obtained a Master’s degree in Health Management.

Dr. Handzhiev has more than 25 years of medical experience as a neurosurgeon.

1. Research Activity

1.1. Publications

The complete list of publications attached to the documents contains a total of 63 titles:

– A dissertation titled “Angiogenesis in Glial Brain Tumors” and 10 scientific publications used for the awarding of the scientific degree “Doctor.”

Among them: 1 book – an abstract based on the defended dissertation; 2 textbook chapters; and 62 publications in refereed and non-refereed journals (including Impact Factor publications), of which 22 as first author.

He was awarded first place and received a grant under the project “Medical Science Fund” (2004–2005).

He was also a mentor under the Ministry of Education and Science (MES) project “Student Internships.”

In 35% of the materials submitted for participation in the competition (22 publications), the candidate is a sole or first author.

According to the reference provided by NACID:

Total IF/SJR from publications and citations: 18.319

From publications – total IF/SJR: 7.117

Web of Science IF (2014 – 0.608/2.485, 2017 – 1.640): total 4.733

Scopus Q4 SJR (2014 – 0.100/1.235/0.382, 2017 – 0.667): total 2.384

From citations – total IF/SJR: 11.202

Web of Science IF (2015 – 2.658, 2019 – 3.267, 2023 – 1.9): total 7.852

Scopus SJR (2015 – 0.643, 2019 – 1.228, 2020 – 0.221/0.195, 2021 – 0.229, 2022 – 0.180, 2023 – 0.654): total 3.35

h-index: 3 (Google Scholar)

1.2. Scientific Forums

Participations in scientific forums in Bulgaria and abroad — more than 35, with published abstracts in journals and conference proceedings with ISBN.

1.3. Authorship and Citations

The candidate presents 31 citations of his publications (excluding self-citations):

20 in refereed editions with international databases – 300 points

10 in non-refereed journals – 50 points

1 citation in a dissertation – 10 points

Total for citations – Indicator D: 360 points.

1.4. Specializations

2000 – Emergency Medical Aid (PHARE Program)

2010 – Techniques for High-Speed Drill and Electric and Pneumatic Instrumentation, Medtronic USA

2011 – License 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 Brain Aneurysms and Arterio-Venous Malformations,” Pirogov Hospital, Sofia

2014 – Course/Certificate – Dandy Bulgaria

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

1.5. Membership in Scientific Organizations

Member of the Bulgarian Society of Neurosurgery.

1.6. Participation in Scientific Projects

Participation in one project:

Medical Science Fund (2004–2005)

Scientific field: Neurosurgery.

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

First place – project No. 15 (Indicator E.16 – 15 points).

He has also contributed to a published university textbook:

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

Chapter 57: Cranio-cerebral Trauma – Basic Concepts, Classification by Clinical Condition and Imaging Findings

Chapter 58: Cranio-cerebral Trauma – Epidemiology, Biomechanics, and Pathophysiology

(Indicator E.20 – 80 points).

2. Profile of Research Activity

The research work of Dr. Handzhiev is mainly in the field of neuro-oncology.

He has more than 25 years of practical experience in neurosurgery, in the diagnosis and therapy of neurosurgical diseases in the fields of neurotraumatology, neuro-oncology, vascular neurosurgery, and spinal surgery.

3. Most Significant Scientific Contributions

The contributions from his publications are presented, grouped by topics, corresponding to the author's research work in the following fields:

Neuro-oncology – The presented dissertation and 28 of the publications submitted for the competition belong to this field. The author has processed and analyzed the largest number of patients in Bulgaria (96 cases) who underwent surgical treatment. For the first time in Bulgaria, the growth factors VEGF and bFGF have been studied in patients with brain tumors. Dr. Handzhiev established the independent prognostic significance and the effect of cerebrospinal VEGF levels on patient survival duration, measured in days, and derived a formula to estimate life expectancy in patients with glioblastoma multiforme. A comprehensive angiogenic analysis has been performed, including plasma and cerebrospinal assessment of VEGF and bFGF concentrations in three groups of brain tumors and in healthy individuals. Two of these studies were presented at the World Congress of Neurosurgery (2013, Seoul, South Korea), and five others – at international congresses in Serbia, Romania, and Greece. Two full-text papers were published in journals with a significant impact factor. Several publications demonstrate the potential of modern physiological MRI techniques – diffusion MRI, used to assess tumor structure, cellularity, and water content, and perfusion MRI sequences, which show capillary density and vascularization. The author has also published rare clinical cases, such as spinal paraganglioma, osteochondroma, and leiomyosarcoma.

Neurotraumatology – There are six publications of contributive value regarding spinal trauma.

Working in a center with extensive experience in this field, the author presents state-of-the-art surgical techniques for stabilization and fusion in all spinal regions. The publications on cranio-cerebral trauma (51 in total) and the authorship of two textbook chapters in the Textbook of Neurosurgery (BAS Publishing House “Prof. Marin Drinov,” 2024) demonstrate serious experience and a modern professional approach.

Degenerative Spinal Diseases – Three publications highlight the candidate's substantial experience in the treatment of degenerative lumbar stenosis through posterior decompression and fusion, as well as in the diagnosis and treatment of patients with low back pain.

Neuroendoscopy – A major contribution of Dr. Handzhiev is his participation in the team with the greatest national experience in neuroendoscopic-assisted evacuation of spontaneous intracerebral hematomas, including deep and thalamic hematomas. This work is supported by 14 publications presenting an impressive number of clinical cases.

Organization of Neurosurgical Work, Quality Evaluation and Control – Dr. Handzhiev participated in the team that developed the first neurosurgical safety checklists in Bulgaria, aimed at preventing complications and errors in neurosurgical practice. The experience with the application of preoperative checklists is presented in three publications, and in another one, the team shares their experience in creating a modern university neurosurgical clinic.

4. Teaching and Scientific-Organizational Activity

Dr. Handzhiev serves as a mentor under the Ministry of Education and Science project “Student Internships.”

5. Diagnostic and Therapeutic Work

Dr. Handzhiev has 25 years of professional experience as a physician.

In his clinical practice, he applies many innovative diagnostic and therapeutic approaches, working in close cooperation with his colleagues from the Departments of Neurology, Surgery, Orthopedics, Vascular Surgery, Interventional Cardiology, and Intensive Care (ICU) — not only at MBAL “St. Anna” – Varna, but also with all hospitals in Northeastern Bulgaria, in his capacity as National Consultant in Neurosurgery.

This collaboration ensures the application of a multidisciplinary approach in patient treatment and the achievement of optimal clinical outcomes.

Dr. Handzhiev meets the minimum national requirements and complies with the Regulations on the Conditions and Procedures for Acquiring Scientific Degrees and Holding Academic Positions at the University “Prof. Dr. Asen Zlatarov” – Burgas, for the academic position of Associate Professor, achieving 1,183 points, significantly exceeding the required minimum of 450 points.

Conclusion

Based on the analysis of his scientific activity and productivity, as well as his teaching and clinical work, and the identified contributions, it is clear that Dr. Deyan Handzhiev is a serious and thorough scholar, lecturer, and physician with extensive, long-standing experience in the field of neurosurgical diseases.

I consider that Dr. Deyan Handzhiev, PhD fully meets all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), its Implementing Regulations, and the Regulations of the University "Prof. Dr. Asen Zlatarov" – Burgas. Therefore, I recommend to the respected Scientific Jury that he be awarded the academic position "Associate Professor" in the field of higher education 7. "Healthcare and Sports", professional field 7.1. "Medicine", and the scientific specialty Neurosurgery, for the needs of the Department of Anesthesiology, Obstetrics and Gynecology, Surgery, Orthopedics, Traumatology, Urology, Neurosurgery, Emergency and Intensive Medicine at the Medical Faculty of the Burgas State University "Prof. Dr. Asen Zlatarov."

01 October 2025

Prof. Valentin Konstantinov Vasilev, DM