STATEMENT

By Prof. Dr. Christo Tsekov Tsekov, MD, Clinic of Neurosurgery, Acibadem City Clinic Tokuda Hospital, Sofia, Bulgaria

Subject: Competition for occupying the academic position of "Associate Professor" in the field of higher education area 7. Healthcare and Sports, professional field 7.1 Medicine, scientific specialty "Orthopedics and Traumatology", for the needs of the Clinic of Orthopedics and Traumatology at Acibadem City Clinic Tokuda Hospital JSC, Sofia.

Candidate: Dr. Evgeni Nedev Vlaev, PhD

The scientific jury was elected at a meeting of the Scientific Council of *Acibadem City Clinic Tokuda Hospital* JSC on 05.06.2025, Protocol No. 58, and approved by Order No. 15-03-221.2 dated 03.09.2025 by the Executive Director and the Procurator of Tokuda Hospital. All requirements and deadlines have been duly observed. All documents and evidentiary materials required under the *Law on the Development of the Academic Staff in the Republic of Bulgaria* and the *Regulations for the Development of the Academic Staff of Acibadem City Clinic Tokuda Hospital JSC* have been duly submitted.

Dr. E. Vlaev was born in 1971. He graduated from a high school with advanced English language teaching in Stara Zagora, where he also completed his higher education, obtaining a Master's degree in 1995. He has worked as a pediatrician in Chirpan, as a military doctor in the garrison of the town of Lyubimets, and as an emergency physician at the Emergency Medical Service in Stara Zagora. During the period 1998–2006, he was an Assistant, Senior Assistant, and Chief Assistant at the Department of Anesthesiology, General and Emergency Medicine of the Medical Faculty at Trakia University, Stara Zagora. Since 2006, he has been a staff physician at the Clinic of Orthopedics and Traumatology at *Acibadem City Clinic Tokuda Hospital* JSC, Sofia.

He has participated in numerous international conferences both in Bulgaria and abroad, attended many short-term courses and professional qualifications mainly in his specialty, across Europe and Asia. He is a member of the Bulgarian Medical Association. He is also registered in the Mountain Rescue Service and has participated in the 18th National Antarctic Expedition to Livingston Island.

For participation in this competition, Dr. Vlaev presents his dissertation thesis for obtaining the educational and scientific degree "Doctor", one monograph, and 30 scientific publications and reports. The presented dissertation (with abstract and three full-text publications related to the dissertation topic: "Operative treatment of neuromuscular scoliosis in childhood" — A. Ivanov, V. Yablanski, E. Vlaev, Medical Review LII, 4, 53—56 (2016); "Surgical treatment of scoliosis in childhood" — V. Yablanski, A. Ivanov, E. Vlaev, V. Stefanov, B. Kamenova, G. Simeonov, Orthopedics and Traumatology 53, 2, 95—99 (2016); and Vlaev E., "Qualitative assessment of the results of surgical treatment of scoliosis", Medical Magazine, ISSN 1314-9709, May 2022) addresses a socially significant problem — the operative treatment of scoliosis in childhood.

The frequency of scoliosis is approximately 3% of the population, and in a significant percentage of children, it progresses, leading to severe disability, which necessitates surgical treatment. Operative intervention has no alternative in progressive cases unresponsive to conservative treatment. However, indicated surgical treatment is often delayed due to various parental considerations and largely because of the frequent mismatch between the expected effect of surgery and the actual results, often nuanced by the subjective perceptions of the patient and their family.

The aim of the dissertation is to find a balance between the type and degree of scoliosis, on one hand, and the achieved result, on the other (objectively and subjectively assessed), ensuring that in the discussion of postoperative outcomes with the patient and their family, there is a significant alignment between expectations and results. This alignment represents a major challenge in complex procedures such as spinal corrections. The problem arises from the surgeon's aspiration to achieve the maximal possible correction permitted by the intraoperative conditions, which, however, does not always correlate with the optimal postoperative result — that is, to determine the precise stage at which correction should cease, even when further correction seems technically feasible and tempting.

The dissertation comprises 138 standard typed pages, structured as follows: Introduction -3 pages; Literature Review -23 pages, with one page of conclusions; Research Methodology -12 pages; Research Results -55 pages; Discussion of Results -21 pages; Conclusions and Recommendations -1 page; References -9 pages. The work is illustrated with 89 figures and 14 tables, including numerous graphical images.

The main conclusion is that, in planning and conducting operative interventions in children with scoliosis, an individualized approach is essential, based on clinical and radiological findings as well as assessment using the SRS-22r questionnaire. This approach includes a thorough discussion of the forthcoming surgery with both children and parents regarding objective and subjective possibilities, expected outcomes, and potential complications in each specific case.

In his monograph "Diagnostic Clarification of Scoliosis: Opportunities, Features, Errors", the author traces the complex, multi-stage process of scoliosis diagnosis, analyzing both his own experience and the literature on the subject. Understanding the pathogenetic mechanisms of this condition forms the foundation of modern treatment, which aims not only to correct deformity but also to preserve mobility and the function of the spine, as well as the cardiovascular and respiratory systems.

The goal of the monograph is to provide practical guidance regarding early diagnosis and the proper selection of treatment methods, in accordance with contemporary understanding of the disease. The monograph logically begins with a brief anatomical introduction, smoothly transitions through a review of treatment methods, and delves into its core theme: diagnostic techniques, their capabilities, practical conclusions, and strategies for obtaining maximum information, with a logical progression toward selecting the most suitable treatment method.

Particular attention is given to radiological studies, presenting various auxiliary techniques for improving their informational value and emphasizing the importance of screening for achieving favorable outcomes. The monograph is exceptionally valuable for its rich illustration with drawings and diagrams, as well as visual documentation, all created by the author himself. It is highly useful to patients and their families, medical students, orthopedic residents, and the broader medical community.

Of the 12 articles presented in peer-reviewed and indexed journals, 8 were published in international scientific editions (four of which have an impact factor), and the remaining 4 were published in Bulgarian journals. Among the journals where these papers appeared are *Spine*, *Journal of Biomarkers*, *Science & Technologies*, *International Journal of Scientific Engineering and Applied Science*, *International Journal of Latest Research in Science and Technology*, *Journal of Clinical and Experimental Investigations*, and *Annals of Pulmonology*.

Among 18 non-refereed publications, 10 were printed in Bulgarian journals and 8 abroad. His scientific activity also includes 22 participations with reports and presentations at Bulgarian and international scientific forums, where Dr. Vlaev was first author in 18% of the cases.

His scientific publications are primarily focused on childhood scoliosis, associated anomalies, electrophysiological problems during spinal interventions, functional conditions of the heart and lungs in such diseases, genetic studies, and the introduction of new methods and technologies.

According to the official reference from the *National Library "Sts. Cyril and Methodius"* and NACID, 53 citations have been registered, 3 of which are in Bulgarian sources and 50 abroad. Dr. Vlaev is first author in 4 publications, second in 3, and third or subsequent author in 23. At scientific forums, he has personally presented reports on four occasions abroad. Across all recorded citations, 12 articles were referenced, 6 of which are indexed in *Scopus*, and 2 are included in monographs.

Dr. Vlaev is an established orthopedic physician who continuously improves his qualifications as well as those of younger doctors. He has attended training courses and practical workshops in numerous leading medical centers around the world: San Diego, Salzburg, Istanbul, Mülheim, Shanghai, Prague, Kuala Lumpur, Jena, Devon, Adana, Moscow, and Vienna.

He is fluent in Russian and English.

In conclusion, Dr. Vlaev is an orthopedic specialist respected by patients and the medical community. He works effectively as part of a team, successfully performs major orthopedic interventions, teaches students and residents, and possesses organizational skills enabling him to lead medical teams. He has authored a monograph and published papers in journals with a high international reputation.

All this provides sufficient grounds for me to affirm that Dr. Vlaev meets all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations of Acibadem City Clinic Tokuda Hospital JSC for the development of the academic staff in this university hospital, and I am pleased and satisfied to vote "YES" for Dr. Vlaev to be awarded the academic position of Associate Professor for the needs of Acibadem City Clinic Tokuda Hospital JSC.

October 10, 2025

Reviewer:

(Prof. Dr. Christo Tsekov, MD