

**REVIEW**

**in a competition for the academic position of "professor"  
in the field of higher education**

**7. Healthcare and sports, Professional field**

**7.1. Medicine, scientific specialty "Vascular Surgery",**

**announced in SG no. 105 / 11.12.2020**

**for the needs of the Faculty of Public Health and Health Care**

**University "Prof. Dr. Asen Zlatarov "Burgas**

**Reviewer: Prof. Dr. Hristo Stoyanov Bozov, MD, Dean of the Faculty of Public Health, University "Prof. Dr. Asen Zlatarov ", Burgas, Member of the scientific jury, according to Order of the Rector №RD 27 / 05.02.2021**

To prepare a review, I was provided with paper and electronic documents that meet the requirements for participation in a competition.

For participation in the competition within the legally determined term documents have been submitted by one candidate – Docent Dr. Valentin Konstantinov Vasilev, MD.

**1. Professional and career development of the candidate**

Dr. Valentin Konstantinov Vasilev was born on October 19, 1959. In 1985 he graduated from the Higher Medical Institute "I. P. Pavlov ", Plovdiv, and in 2015 a master's degree in " Business Administration and Health Management "at the University" Prof. Dr. Asen Zlatarov "-Burgas.

In 2010 he received the educational and scientific degree "Doctor" in the scientific specialty "General Surgery". In 1990 he acquired the specialty "General Surgery", and in 2004 - the specialty "Vascular Surgery". He has specializations in lower endoscopies (1988), laparoscopic surgery (2006), endovascular surgery (2016), vascular ultrasound Doppler diagnostics (2016).

The work experience of Dr Vasilev began in the hospital in Kazanlak as an intern in the surgical department (1985-2000), head of the surgical department (2000-2006) and head of the vascular sector (2006-2010). In 2010 he became Head of the Department of Vascular Surgery at the Hospital - Burgas, and from 2016 until now - Head of the Clinic of Vascular Surgery at the University Hospital - Burgas AD.

His academic internship began in 2012 as an assistant in surgery, from 2013 to 2015 - Chief Assistant in Surgery at the University "Prof. Dr. Asen Zlatarov "Burgas. In December 2015 he was habilitated as an "associate professor" in surgery at the Faculty of Public Health and Health Care at the University "Prof. Dr. Asen Zlatarov ". From December 2016 until now he has been the Head of the Department of Preclinical and Clinical Disciplines.

## **2. General description of the submitted materials.**

The presented set of materials and documents for participation in the competition is in accordance with the Regulations for the terms and conditions for acquiring scientific degrees and holding academic positions at the University "Prof. Dr. Asen Zlatarov "- Burgas and includes:

- Application to the Rector for admission to the competition;
- Copy of the announcement in the State Gazette;
- Creative CV;
- Documents for proving work experience under par. 1 item 2 (3 pieces);
- Copies of diplomas for higher education and for acquired medical specialties;
- Copies of diplomas for ONS doctor and for associate professor;
- Document for participation in research projects;
- Information for teaching activities;
- List of doctoral students and postgraduates, led by the candidate;
- Declarations in accordance with paragraph 18;
- Information on fulfillment of the minimum requirements;
- Complete list of publications;
- List of publications for participation in the competition;
- Author's reference for the scientific contributions of the works;
- Reference to the citations in which the candidate's publication is cited;
- Copy of scientific papers.

The documents also include: an abstract of the dissertation of the candidate for the educational and scientific degree of Doctor on the topic "The problem of acute cholecystitis in old age and old age"; reference for participation in scientific congresses, conferences with forums with printed abstracts; certificates of participation and awards. Dr. Vasilev participated in the competition with 41 materials, of which:

- 1 monograph on "Peripheral atherosclerotic disease in diabetics",



- 17 scientific publications, referenced and indexed in world-famous databases with scientific information (Scopus; Web of Science);
- 21 in unreferred journals with scientific review;
- 2 teaching aids.

Of the scientific publications, 16 are in Latin, 22 are in Cyrillic. In 16 of them (39%) the candidate is an independent and first author.

The documents presented by Dr Valentin Vasilev are arranged correctly and fully comply with the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions at the University "Prof. Dr. Asen Zlatarov" - Burgas.

### **3. Teaching and learning activities of the candidate.**

Dr Valentin Vasilev has more than 10 years of teaching experience. For this period, 8 curricula have been developed in the disciplines "Surgery", "Surgery Part 1", "Surgery Part 2", "Plastic and Reconstructive Surgery" for the specialties in PHC and Medical College at the University.

He is the author of 3 textbooks related to medical and social rehabilitation of diabetes mellitus and its complications, modern methods for diagnosis and treatment of complications of diabetes mellitus and innovative approaches to training, as well as the current work of the nurse and assistant doctor. Two of them (1 individually and 1 co-authored) are attached to the documents for participation in the current competition. Of particular interest is the "Handbook of Nurses and Medical Assistants", which proposes models of behavior and building professional relationships in the daily activities of doctors, nurses and medical assistants.

Dr Vasilev is the supervisor of one successfully defended doctoral student at the Medical University - Sofia and one doctoral student before the defense at the Thracian University - Stara Zagora.

According to the attached documents, under his guidance, two specialists have acquired the specialty "Vascular Surgery" at the Clinic of Vascular Surgery at the University General Hospital for Active Treatment in Burgas, and currently one is studying.

As the head of the Surgical Department in the Multi-profile Hospital for Active Treatment - Kazanlak for the period 2000-2006, three specialists have acquired a specialty in "General Surgery".

#### **4. Research and major scientific and applied contributions.**

From the "List of publications for participation in the competition" it is evident that the scientific production of the candidate for participation in the competition is fully in accordance with its problems. The presented publications are in peer-reviewed scientific journals and are in accordance with the national and university educational and normative base for acquiring scientific degrees and for holding academic positions. All 41 publications submitted for the competition are in full text.

The research activity of the candidate is characterized by scientific and scientific-prologue diversions, which can be eaten in the following directions:

- Diagnosis, surgical treatment and prevention of peripheral atherosclerotic disease and its complications, to which the monograph on "Peripheral atherosclerotic disease in diabetes" is devoted. It provides a detailed analysis of the risk factors leading to pre-diabetes. The author has not only defined and systematized the problem, but also outlined the main steps for its diagnosis, treatment, prevention and prophylaxis. Special attention is paid to the diabetic foot, as an in-depth analysis of this specific complication of diabetes is made and it is defined as a separate symptom complex. The development of own algorithms for treatment, care and prevention in patients with diabetic foot is a valuable asset for medical science and practice in this area. Linking peripheral atherosclerotic disease (PAD) to the effects of diabetes mellitus and proving the correlation between them leads to a more adequate reading of the indications for the type of treatment and the sequence of conservative therapy and surgery. Particularly innovative is the shared experience regarding the minimally invasive endovascular therapy of PAH in patients with diabetes mellitus and the launched more aggressive and anticipatory effect, especially in distal tibial lesions. The results unequivocally show the correctness of such treatment behavior in the direction of a significant reduction in high amputations in diabetics. Given the need for a comprehensive approach in monitoring the condition of diabetics, the proposed tactical models of surgical behavior and endovascular treatment are extremely useful.

- Diagnosis, treatment and medical and social prevention of diabetes mellitus and leading surgical complications. This issue is closely related to the previous one, but here the emphasis is on the leading surgical complications of diabetes on the limbs. The candidate's observations on the diagnosis, treatment algorithm, prevention and prophylaxis of diabetic foot are summarized in 11 scientific papers [[4], [14], [17], [18], [19], [20], [29]. , [30], [31], [32], [33]) and the textbook [2]. Significant scientific contribution is the establishment of the common pathogenetic mechanism between



diabetes mellitus (DM), deep vein thrombosis (DVT) and chronic venous disease (CVD), expressed in the subclinical inflammatory process and the high level of inflammatory mediators leading to the development of endothelial dysfunction, both arterial and venous vessels. The direct relationship between the age of diabetes and the appearance and development of CVD is highlighted.

- Extremely interesting and with a significant contribution is the attempt to integrate mathematical models of the vascular system in the diagnosis, surgery and medical and social prevention of leading socially significant diseases of the circulatory system. The theory of generalized networks has been used to simulate the processes of blood and lymph circulation and to develop methods for assessing the blood supply in various vascular diseases. The developed mathematical models of the arterial blood supply of the upper limb ([1]), the lower limb ([11]) and the cardiovascular system as a whole ([2]) are original and the first ones aimed at tracking, simulating and analyzing normal and pathological processes in the vascular system. Based on mathematical OM, blurred estimates have been proposed for the collection and analysis of information on diabetes mellitus and venous thromboembolic diseases ([4], [8]). The rare congenital pathoanatomical variants of the popliteal artery are considered and original and rarely applied tactical solutions in its treatment are proposed ([27]). The shared experience with transluminal angioplasties with different localizations, including the renal arteries ([3], [26], [37], [42], [43], [44]) has also been extended. The candidate's own concept of diabetes as an independent risk factor for the occurrence and development of venous thromboembolism ([22]), as well as its analysis of predisposing and provoking factors for chronic venous disease ([23], [34], [45]) have significant contributing nature.

- Diagnosis, treatment and prevention of diseases of general surgery and social medicine. The scientific results presented in this direction by the candidate are focused on:

- Use of innovative statistical methods for research, surgical treatment and analysis of malignant neoplastic diseases ([9], [12], [13], [15]);
- Diagnosis, treatment and health care of socially significant diseases by offering own algorithms, author's research and analyzes through intelligent techniques and tools (neural networks, cluster analysis, multi-criteria analysis, etc.) [5], [6], [10], [21]);
- Treatment of wounds with unique chitosan-zeolite nanocomposite films for topical treatment ([24], [25]);

- Propose your own concept on specific organizational activities in marine medicine ([28]).

According to the University Regulations, a "Reference for fulfillment of the minimum requirements" is attached to meet the minimum required points by groups of indicators for the academic position "professor" in field 7. Health and sports, professional field

7.1. Medicine:

Group of indicators	Minimum requirements for a professor at the university	Dr Vassilev performance
A Indicator 1	50	50
B Indicator 2	-	0
C Indicator 3	100	100
D Sum of indicators from 5 to 9	250	586.54
E Sum of indicators from 10 to 12	150	350
F Is the sum of the indicators from 13 to the end	120	285
	670	1371.54

It shows that the candidate meets all the minimum requirements, and in a group of indicators D, E and E significantly exceeds them.

The information provided gives me reason to evaluate the candidate as an established scientist with proven scientific achievements in the field of vascular surgery. Excellent knowledge of clinical vascular surgery and combination with modern tools for scientific analysis confirms him as a working and active researcher.

### **5. Publishing activity and indexing**

According to the "Complete list of publications" at the moment Dr Valentin Vasilev has a total of 112 titles of scientific papers, publications and participation in scientific forums and events in the country and abroad. In 63 of them (56%) the candidate is an independent or first author.

Dr Valentin Vasilev has more than 30 participations in scientific forums in the country and abroad with reports, abstracts, posters and programs on various topics of the treatment and diagnostic process in clinical surgery and vascular surgery, which clearly proves his active publication.

According to the reference "Scientific projects" Dr Vasilev is the head of teams of two research projects at the University.

To participate in the competition, the candidate has submitted a reference to 43 citations of his scientific papers. 9 of them are in scientific journals, referenced and indexed in world-famous databases with scientific information or in monographs and collective



volumes, 9 are in monographs and collective volumes with scientific review and 25 are in non-referenced journals with scientific review.

The above proves the scientific achievements of Dr Valentin Vasilev.

### **Conclusion**

Dr Valentin Vasilev is a completed and established clinician and vascular surgeon, a recognized physician and researcher with significant contributions in the field of modern surgery and vascular surgery. He has a very high authority not only as a researcher but also among the professional medical community. He has a significant classroom workload and pedagogical experience. His scientific results are original and with clinical application. His knowledge and practical activity in various fields of surgery and vascular surgery, as well as the experience of his positions make him a highly qualified lecturer, successfully applying new knowledge in the disciplines he teaches. He is a member of national and European organizations in the field of vascular surgery.

After a detailed review of the documentation provided, I can note that Dr Vasilev categorically meets the minimum and even significantly exceeds the requirements for the academic position of "Professor" in the scientific specialty "Vascular Surgery" under the Law on Academic Development of the Republic of Bulgaria, Regulations for its application, the Regulations for the terms and conditions for acquiring scientific degrees and holding academic positions at the University "Prof. Dr. Asen Zlatarov" - Burgas.

In view of the above, I am voting in favor of Docent Dr. Valentin Konstantinov Vasilev, MD to take the academic position of "Professor" in the scientific specialty "Vascular Surgery".

**March 13, 2021**

**Professor Dr. Hristo Bozov, MD**