

To
The Head of the Scientific Jury,
Assigned per Order № 54/01.02.2023
from the CEO and Procurement
of MBAL National Hospital of Cardiology

S T A T E M E N T

from

Prof. Dr. Vasil Yordanov Chervenkov, MD, PhD

Head of Vascular Surgery Clinic at Acibadem City Clinic Tokuda Hospital, Sofia

Subject: Concerning the Procedure of awarding the Academic Degree "Associate Professor" in the field of Higher education 7. Health and sport, Professional field 7.1. Medicine with specialty "Cardiac Surgery" for the needs of the Department of Cardiac Surgery, National Hospital of Cardiology, announced in SG issue №96/02.12.2022.

Information of the procedure: By order №54/01.02.2023 of the Executive Director of the National Hospital of Cardiology, Mr. Rosen Petrov, I have been appointed a member of the Scientific Jury of the open competition. Accordingly, at the first non-present meeting of the Scientific Jury on 17.02.23, I was appointed as a member of the Scientific Jury and was assigned to submit a "Statement."

Dr. Dimitar Ivanov Kyuchukov, MD, Head of the Cardiac Surgery Department at the National Hospital of Cardiology, is the only candidate who submitted documents for participation in the competition. The eligibility committee confirmed that he meets all the requirements of the Academic Staff Development Law of the Republic of Bulgaria, the Application Regulations as well as the Regulations for acquiring an Academic position in the National Hospital of Cardiology and can be assessed by the appointed Scientific Jury:

- Acquired educational and science degree "Doctor."

- Has an academic position as Chief Assistant Professor at the Department of Cardiovascular Surgery and Invasive Cardiology, Medical University, Sofia, since 2019
- In order to have the right to participate in the competition, he submitted a sufficient number of high-quality scientific publications that do not duplicate those submitted for acquiring the educational and scientific degree "Doctor."
- He meets all the requirements of the Academic Staff Development Law of the Republic of Bulgaria.
- There is no evidence of plagiarism in his scientific publications
- Proven specialist with proven scientific and practical achievements

PROFESSIONAL AND ACADEMIC DEVELOPMENT OF THE CANDIDATE

PROFESSIONAL DEVELOPMENT

Dr. Dimitar Ivanov Kyuchukov was born in 1976 and graduated from Medical University, Sofia, in 2000. He acquired a specialty in "Cardiac Surgery" in 2014. In 2016, he successfully defended his dissertation on "Surgical treatment of atrial arrhythmias" and was awarded an educational and scientific degree "Doctor" in Cardiac Surgery, holding a diploma from MU-Sofia. During the same year, he completed a Master's Degree in "Health Management" at the Faculty of Public Health, Medical University, Sofia. In 2019 he acquired a "Vascular Surgery" specialty. From 2000 to 2014, he worked as a surgeon in the Cardiac Surgery Clinic at University Hospital "St.Ekaterina," Sofia. From 2016 to 2022, he was the Head of the Department for Surgical Treatment of Acquired Heart Diseases in the same hospital. Since February 2023, he has been assigned as Head of the Cardiac Surgery Department at the National Hospital of Cardiology.

ACADEMIC DEVELOPMENT

From 2008- 2019 Dr. Dimitar Ivanov Kyuchukov was appointed as an assistant in the Department of Cardiovascular Surgery at Medical University, Sofia. Since 2019, he is a the Chief Assistant Professor in the Department of Cardiovascular Surgery and Invasive Cardiology MU Sofia.

SCIENTIFIC RESEARCH ACTIVITY. SCIENTOMETRICAL INDICATORS.

For the present competition, Dr. Dimitar Ivanov Kyuchukov MD, Ph.D. participates with a total number of 33 scientific titles:

Defended dissertation on the topic: "Surgical treatment of atrial arrhythmias" MU-Sofia

Original monograph - "Surgical treatment of atrial fibrillation" - ISBN 978-619-753686

Co-author in three chapters of a collective monograph: "Cardiac Surgery" - ISBN: 987-954-322-242-1

28 publications in scientific papers - 11 are in journals indexed and referenced in a world database, 9 of them are published in journals with an Impact Factor. After acquiring the academic position of "Chief Assistant," the candidate published 14 of his scientific works. In 15 of those presented for this competition, Dr. Kyuchukov is the first author; in the rest, he participates as part of a team. The candidate has 17 scientific publications in Bulgarian journals from the national reference list or collections of peer-reviewed reports.

Citations. To 31.12.2022, according to a quote from the Central medical library, the candidate has 12 citations in Bulgarian peer-reviewed journals and one in a journal with an Impact Factor. After this date, the candidate submitted evidence for another 7 citations in Bulgarian peer-reviewed journals. Therefore, there is no evidence of self-citation or plagiarism.

SCIENTOMETRICAL INDICATORS

Group of Indicators	Indicators	Minimum required points	Total points
A	1. Dissertation for obtaining of educational and scientific degree "Doctor."	50	50
B	3. Habilitation work – monograph	100	100
C	7. Publications and reports published in scientific journals, referenced and indexed in a world-renowned database of scientific information 8. Publications and reports published in unreferenced peer-reviewed journals or edited collective volumes 9. Published chapter of a collective monograph	200	298
D	10. Citations or reviews in scientific publications referenced and indexed in world-renowned databases of scientific information or monographs and collective volumes 12. Citations or reviews in unreferenced peer-reviewed journals	50	110
TOTAL		400	558

The total sum of the points of the scientometric indicators is 558. Therefore, it covers the minimum national requirements of the Academic Staff Development Law of the Republic of Bulgaria, the National Application Regulations, and the Regulations for acquiring an Academic position in the National Hospital of Cardiology.

SCIENTIFIC ACTIVITY AND FORMULATION OF SCIENTIFIC CONTRIBUTIONS

According to the submitted publications, Dr. Dimitar Ivanov Kyuchukov's scientific research and practical interests are primarily related to his long-term daily practice in cardiothoracic surgery and extended in several directions: Surgical treatment of supraventricular arrhythmias and atrial fibrillation - 6 publ. (1; 2; 11; 18; 19; 20;), Surgical revascularization of the myocardium - 7 publ. (3;4;5;14;15;24;27), Surgical treatment of complications of ischemic heart disease - 7 publ. (7;10;17;28;31;32;33), Surgical treatment of diseases of the aorta - 7publ. (9;12;13;21;22;29;30), Surgical treatment of mitral valve diseases - 3 publ. (6;16;23), Surgical treatment of aortic valve diseases - 2 publ. (8;25;) Surgical treatment of pulmonary thromboembolism - 1 publ. (26).

The main scientific contributions can be formulated based on the dissertation work, the monograph, and the publications where the candidate is the first author. Dr. Kyuchukov's primary research focuses on the surgical treatment of supraventricular arrhythmias. This topic is considered in his dissertation and monograph, as well as in four articles, of which he is the first author. All those scientific materials with original character thoroughly cover the topic and can serve as a base for formulating scientific-practical and scientific-theoretical contributions. The candidate's dissertation is the first study of surgically treated patients with atrial arrhythmias in Bulgaria, where the results of radiofrequency ablation for treating supraventricular arrhythmias were analyzed for the first time. The methodology of ablation of chronic atrial fibrillation was presented for the first time in Bulgaria. Epidemiologic, clinical, and anatomical characteristics were observed, and predictors of procedure failure were identified. The dissertation's most important scientific applied contribution is the development of an algorithm for the indications for performing surgical radiofrequency ablation. The candidate's monograph is a natural sequence to the research mentioned above work.

Moreover, it is the first of its kind in Bulgaria and represents an in-depth review of the current state of the problem, with a comprehensive description of technical details. In the four articles covering the same problem, the patient's age has been considered a risk factor for the failure of

antiarrhythmic operations. Three specific situations were also considered where ablation is reduced to the isolation of the pulmonary veins.

Another essential scientific topic for which Dr. Kyuchukov has 7 publications is surgical revascularization of the myocardium. In four of them, he is the first author (3;4;24;27), and the formulated contributions are scientific-theoretical and confirmatory. In his study, for the first time in Bulgaria, he compared and evaluated two methods of antithrombotic therapy after coronary artery endarterectomy (3). Other publications analyzed the benefits of two contemporary techniques for preparing "grafts" for aortocoronary bypass (24;4), and the early postoperative results were interpreted.

The other areas with the candidate's publications as a first author are Surgical treatment of aortic diseases – three out of seven publications. (12;21;22), Surgical treatment of mitral valve diseases - one publication. (23), Surgical treatment of aortic valve diseases - one publication (25), and Surgical treatment of pulmonary thromboembolism - one publication (26). The main scientific and practical contributions of an original nature for Bulgaria are the formulation of a therapeutic strategy and successful treatment of esophageal rupture after endoprosthesis of the thoracic aorta (12), a rare success even in world literature sources; formulation of indications for cannulation of the axillary artery (21); formulation of indications and successful performance for the first time in Bulgaria of prosthetics of the ascending aorta and restoration of the aortic root using the modern methodology called Florida Sleeve by a team under the leadership of Dr. Kyuchukov (22). As a result of the "GRANT" project assigned by the Medical University, Sofia, in which Dr. Kyuchukov is the lead researcher, a system for virtual training of surgeons performing minimally invasive ring-annuloplasty of the mitral valve was developed (23). Dr. Kyuchukov is one of the surgeons who helped introduce the "seamless" aortic valve prostheses in Bulgaria and, in particular, for the method of their implantation through mini sternotomy. (25) In the last publication, as an independent author, Dr. Kyuchukov describes an original technique for performing retrograde pulmonary perfusion of a beating heart in the case of severe acute pulmonary embolism. (26)

EDUCATIONAL AND TEACHING ACTIVITY

Dr. Dimitar Ivanov Kyuchukov, MD, has taught Medical University students since 2008. His teaching activity in the last three years relates to his work as a "Chief Assistant Professor" in the Department of Cardiovascular Surgery and Invasive Cardiology at the Medical University, Sofia.

According to the submitted report on his teaching hours (certificate issued from MU, Sofia), for the last three years, the candidate has 780 hours of classroom attendance and postgraduate training corresponding to the requirements for obtaining the academic position of Associate Professor.

MEMBERSHIP IN SCIENTIFIC ORGANIZATIONS

Dr. Kyuchukov is a member of the Bulgarian Association for Thoracic, Cardiac, and Vascular Surgery (BATCVS), the Bulgarian Society of Cardiac Surgery (BSCS), where he is a member of the board of directors, and the European Association of Cardio-Thoracic Surgery (EACTS).

CONCLUSION

Dr. Dimitar Kyuchukov MD, Ph.D., is an accomplished cardiac surgeon with recognized contributions in Bulgaria, with significant research and teaching impact. Based on the submitted documents and their analysis, I believe that Dr. Dimitar Ivanov Kyuchukov meets all requirements of the Academic Staff Development Law of the Republic of Bulgaria, the Application Regulations as well as the Regulations for acquiring an Academic position in the National Hospital of Cardiology, therefore I recommend to the respected Scientific Jury to vote positively and to award Dr. Dimitar Ivanov Kyuchukov with the academic position "Associate Professor" for the needs of the Department of Cardiac Surgery at National Hospital of Cardiology.

16.03.2023

Sofia



Prof. Dr. Vasil Chervenkov, MD, PhD