

To  
the President of the Scientific Jury,  
appointed by order  
of the Executive Director  
of the MHAT National Heart Hospital  
№ 54/01.02.2023

## **S T A T E M E N T**

from

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Clinic of Vascular Surgery at National Heart Hospital

**Subject:** Participation in a competition for the academic position of "Associate Professor" in the field of higher education 7. Health and sport, Professional field 7.1. Medicine with specialty "Cardiac Surgery" for the Department of Cardiac surgery needs at the National Heart Hospital, announced in SG issue № 96/02.12.2022.

I was assigned as a member of the Scientific Jury with order No 54/01.02.2023 issued by the Executive Director of MHAT National Heart Hospital. Therefore, on the first online session of the Scientific Jury from 17.02.2023, I was defined to write a "Statement."

For the above competition, Dr. Dimitar Ivanov Kuychukov, MD, Ph.D., Head of the Cardiac Surgery Department at the National Heart Hospital was the only candidate who submitted documents for participation in the competition according to the legal deadline. He meets the requirements of the regulation for the academic position "Associate Professor" and the rules for acquiring an Academic position in the National Heart Hospital, namely:

- Acquired educational and scientific degree "Doctor."
- He holds the academic position of Chief Assistant Professor at the Department of Cardiovascular Surgery and Invasive Cardiology, Sofia Medical University, since 2019.

- 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 education and science 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

Based on the evidence, Dr. Dimitar Ivanov Kyuchukov was admitted to participate in the announced competition and evaluation by the Scientific Jury.

## **II. Biographical information related to the professional and scientific development of the candidate**

Dr. Dimitar Ivanov Kyuchukov was born in 1976 and graduated from Medical University-Sofia in 2000 with excellent results. During the same year, he started work at the Cardiac Surgery Clinic at University Hospital " St. Ekaterina," Sofia, now "Prof. Dr. Al. Tschirkov". He acquired a "Cardiac Surgery" specialty in 2014 and "Vascular Surgery" in 2019. In 2016, he completed a Master's Degree in "Health Management" at the Faculty of Health Sciences, Medical University - Sofia. Since 2008, after a competition, he has been appointed as an assistant at the Department of Cardiovascular Surgery at Medical University -Sofia. Since 2019, he is a Chief Assistant Professor in the same department. In 2016, he successfully defended his dissertation: "Surgical treatment of atrial arrhythmias," and was awarded an educational and science degree, "Doctor, Ph.D." in Cardiac Surgery, a diploma from MU-Sofia -000517 475-Д / 05.12.2016. From 2016 to 2022, he was the Head of the Department for Surgical Treatment of Acquired Heart Diseases at St.Ekaterina UH. On 03.10.2022, he was assigned as the interim executive Head of the Department of Cardiac Surgery at the National Heart Hospital. In February 2023, after a competition, he was commissioned in the same position for five years.

Dr. Dimitar Ivanov Kyuchukov is a proven specialist in Cardiac Surgery, with numerous specializations in world-famous cardio-thoracic centers, for which he presented sufficient evidence in the additional materials for the competition.

### **III. Research activity and scientific contributions.**

#### **Research activity assessment**

For the current competition, Dr. Dimitar Kyuchukov presented a list of 33 scientific publications, 14 of which are after acquiring the academic position of "Chief Assistant ."Nine articles are in Journals with Impact Factor, two are in Scopus-indexed Bulgarian journals, 12 are published in journals from the national reference list, and 4 are published in peer-reviewed digests from conference reports. The candidate is a co-author of three chapters of a collective monograph and an author of the monograph "Surgical treatment of atrial fibrillation," presented as a habilitation thesis. According to a quote reference from the central medical library, the candidate has 12 quotes from Bulgarian sources and one in a journal with an Impact Factor of 31.12.2022. After this date, until the deadline for the current submission of the competition documents, Dr. Kyuchukov submitted evidence for 7 more quotes. There is no evidence of self-quotes or plagiarism. The total sum of the points of the scientometric indicators covers the minimum national requirements of the Academic Staff Development Law of the Republic of Bulgaria, the Application Regulations, and the rules for acquiring an Academic position in the National Heart Hospital.

#### **Formulation of scientific contributions after acquiring the educational and scientific degree "Doctor."**

##### **A. Contributions related to the monograph and dissertation thesis.**

The presented monograph shows a detailed review of the modern aspects of all possible surgical methods for treating atrial fibrillation for the first time in Bulgaria. The author shares his experience with treating atrial fibrillation with radiofrequency ablation devices. Algorithms have been developed to gradually implement the "Labyrinth" procedure when added during any other cardiac surgery. It also focuses on the possibilities of creating a hybrid team of cardiologists, electrophysiologists, and cardiac surgeons, whose aim is to perform a complex interdisciplinary treatment of atrial fibrillation.

##### **B. Contributions related to Published Articles and Reports.**

Besides the contributions of an original and confirmatory nature, which are the result of Dr. Kyuchukov's primary scientific research on the subject - Surgical treatment of supraventricular arrhythmias and atrial fibrillation (Dissertation, Author's Monograph, articles-11,18,19,20), where

all aspects of the surgical treatment of this significant health problem are discussed and examined in detail, Dr. Kyuchukov has also actively published research works on several other important cardiac surgical topics: Surgical myocardial revascularization - 7 publications. № from the list: 3;4;5;14;15;24;27; Surgical treatment of complications of ischemic heart disease - 7 publications. № from the list: 7;10;17;28;31;32;33; Surgical treatment of aortic diseases- 7 publications. № from the list: 9; 12; 13; 21; 22; 29; 30; Surgical treatment of mitral valve diseases - 3 publications. № from the list: 6;16, 23; Surgical treatment of aortic valve diseases-2 publications. № from the list: 8, 25; Surgical treatment of pulmonary thromboembolism - 1 publication. № from the list: 26.

The main scientific contributions originating from the scientific and practical research of Dr. Dimitar Kyuchukov in the areas mentioned above are as follows:

The candidate was a team member that, for the first time in Bulgaria, examined the results of many patients after revascularization performed without extracorporeal circulation. The procedural success and procedural characteristics in this type of surgery were analyzed. In addition, the complications that occurred were presented (14;15). In his study, the candidate, for the first time in Bulgaria, compared and evaluated two methods of antithrombotic therapy after coronary artery endarterectomy (3). In two publications, Dr. Kyuchukov described two current and still debatable methods for preparing "grafts" for aortocoronary bypass (24;4). The candidate analyzed the complication predictors and the early postoperative results achieved by applying these methods.

One of the very few studies executed in patients with mitral valve reconstruction for an extremely long period in Bulgaria analyzed the methodology results and confirmed its advantages to the valve prosthetics, which was carried out by a team with the participation of Dr. Kyuchukov (6). The results described were one of the largest published so far, and the provided data were of international value. For the first time in Bulgaria, the methods for the Hybrid approach in complex pathology of the aorta have been theoretically and scientifically applied (9;12;13;21;22;29;30). Different scenarios were considered, and the relevant indications and behavior patterns were presented, guaranteeing the effectiveness and safety of the methods. Furthermore, for the first time in Bulgaria, the results of applying the latest methods for reconstructing the aortic root and retrograde pulmonary vascular perfusion in pulmonary thromboembolism have been analyzed (22,26).

#### **IV. Teaching and lecturing activities**

Despite intensive surgical work, the academic lecturing activity of Dr. Dimitar Kyuchukov was related to the execution of his duties as a lecturer in the Department of Cardiovascular Surgery and Invasive Cardiology at the Medical University-Sofia. According to the submitted report on the teaching hours ( certificate issued from MU-Sofia), the candidate had 780 hours of classroom attendance and postgraduate training for the last three years. In addition, he was a supervisor of two trainees.

#### **V. Conclusion**

After carefully examining all submitted documents and presented materials, I believe they meet all the National Heart Hospital requirements. Therefore, Dr. Dimitar Ivanov Kyuchukov applies for the competition with sufficient publications and reports presented at international forums, which score points on scientific-metric indicators above the required ones. Furthermore, the scientific production of Dr. Kyuchukov shows original theoretical and applicable knowledge.

**Therefore, I confidently give a positive assessment and suggest to the honorable members of the Scientific Jury to vote positively for the election of Dr. Dimitar Ivanov Kyuchukov, MD, Ph.D., for the academic position of "Associate Professor" in the field of higher education 7. Health and sport, Professional field 7.1. Medicine with specialty "Cardiac Surgery" for the Department of Cardiac surgery needs at National Heart Hospital, announced in SG issue no. 96/02.12.2022.**

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Sofia

Issued by:

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