

## OPINION

by

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Member of the Scientific Jury, designated by Order No. R-109-175 / April 23, 2021 by Prof. Dr. Valentin Ignatov, MD, PhD - Rector of Medical University Prof. Dr. Paraskev Stoyanov, Varna.

Subject: Competition for the occupation of the academic position Associate Professor in the field of higher education 7 Health and Sports, in the professional field 7.1 Medicine and scientific specialty "Cardiology" for the needs of the First Department of Internal Diseases, Faculty of Medicine at the Medical University of Varna and for the Second Clinic of Cardiology at the University Hospital "St. Marina" - Varna.

### **Brief information about the competition**

By order No. R-109-175/23.04.2021 of the Rector of the Medical University-Varna I was appointed to prepare an opinion. The competition was announced in the State Gazette No. 17/26 Feb 2021. Dr. Lilyana Georgieva Mircheva is the only candidate. The procedure for announcing the competition is in accordance with the requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria / 05.05.2018 and with the Rules for the Development of the Academic Staff in the Medical University-Varna / 28.01.2021.

### **Short details of the applicant**

Dr. Lilyana Mircheva completed her higher education in medicine in 2004 at the Medical University of Varna with honours. She started working as a physician in an ambulatory practice in Varna 2004-2006, and since 2007 she started her career as a resident, in First and Second Cardiology Clinics of UMHAT Sv. Marina in Varna. Since 2013 she was appointed an assistant professor, and in 07.2018 as a chief administrative assistant professor in Medical University and in UMHAT Sv Marina, Varna. Dr. Mircheva has an excellent command of German and may use English language.

### **Specialties acquired and postgraduate qualifications**

Dr. Lilyana Mircheva has acquired a specialty in Cardiology - 2014.

### **Specializations:**

Qualification for Highly Specialized Activity Echocardiography – fundamental level.  
Qualification for Highly Specialized Activity Echocardiography – expert level.

Specialization in transesophageal echocardiography, National Cardiology Hospital, Sofia in 2017.

Postgraduate Course in Heart Failure, University of Zurich, Switzerland and European Heart Failure Association

**Projects:**

She participated in several clinical trials of medications in Cardiology.

**Professional Experience**

Dr. Lilyana Mircheva has devoted her interest for a long time in the internal medicine and Cardiology in particular, and she has now more than 12 years dedicated to treating patients with heart diseases.

In terms of professional qualification, she fulfills the requirements for habilitation.

**Research activity**

Dr. Lilyana Mircheva received her PhD degree in 2017 after successfully defending her dissertation on the topic: "Optimization of patient care in patients with heart failure after dehospitalization". **50 points**

In this competition, the applicant presented the following scientific data – 19 scientific publications ( of 41 in total):

- a monography work with a total volume of 167 pages on the topic: "Congestion in heart failure" - 2020, **100 points**.

- Publications:

A. To cover the minimum state requirements by the Law from 2018 and the Rules of MU-Varna / 2021: **214 points**.

o In scientific publications, abstracted or indexed by world famous databases WOS or Scopus: **total 8**. Of them, with Impact Factor are 8, total IF 57,066.

o In non-refereed scientific peer-reviewed journals or in published collective volumes: full text – 1.

o Chapter in a collective monograph - 1.

B. Articles in non-refereed journals with scientific review beyond the required minimum state requirements – 8, **42,25 points**.

- Publications participating in previous contests which are not reviewed - 6.

- Participation in international scientific events – 1, national and regional scientific events - 15.

Number of citations: total **6**: 1 in abstracted or indexed by world famous databases scientific journals, 1 in monography or peer-reviewed collective volumes, 4 in peer-reviewed non-referred: **50 points in total**.

Dr. Mircheva is an individual author in 3 publications, first author in 12, second author in 3 and third and subsequent in 7 of all scientific papers.

Thus, the publication activity on this indicator fulfills the minimum state requirements of the Law and of the Regulations of the Medical University of Varna for acquiring the academic position of Associate Professor.

### **Scientific achievements and contributions**

Dr. Mircheva's main scientific interests are in the field of Cardiology in 8 major directions.

1. 1. Heart failure. (A3, B3, G7.1-7, G9.1, publication 4 for chief assistant prof., publication 6 outside scientometric indicators) This disease is the main scientific interest of Dr. Mircheva, as she also has a solid theoretical training as a specialist in this field, certified by renowned international organizations. Contributions are in the development of an outpatient follow-up program for patients with HF with a view to optimizing care after discharge from hospital. Active outpatient follow-up has been shown to decrease more than twice all-cause mortality. The reasons for rehospitalizations are analysed which are also reduced more than twice. This approach improves the quality of life and functional status of patients, assessed by a 6-minute walking test. The importance of natriuretic peptides in the diagnosis, treatment and prognosis of patients with chronic HF is confirmed. The main analysis was made of the role of congestion in worsening the condition of patients with HF. There is also scientific research on various aspects of treatment, both with Ivabradine medication, diuretics, and for the role of ultrafiltration as an alternative method in severe decompensated HF. Attention is paid to various risk factors such as depression, hyperuricemia, iron deficiency.

2. Cardiooncology (G8.1) Analysis of the basic mechanisms by which the main oncological drugs affect the work of the heart.

3. Infectious endocarditis. (G7.8, publications 1, 2 and 5 for chief assistant) Analysis of the application of the recommendations of the care of patients with this serious disease, as well as presenting clinical cases with a rarer microorganism as a causative agent.

4. Hyperuricemia (publications 1 and 7 outside scientometric indicators) - The first epidemiological study of the frequency of hyperuricemia in the Bulgarian population, as well as a study of its prevalence among patients with HF.

5. Iron deficiency (publication 8 outside of scientometric indicators) - one of the first studies in our country to clarify the prevalence and role of iron deficiency in patients with heart failure.

6. Valve diseases (publication 3 outside scientometric indicators). Analysis of the main types of degenerative diseases of the mitral valve.

7. Imaging diagnostics in ischemic heart disease (publication 4 outside scientometric indicators, publication 3 for chief assistant) - study of the role of computed tomography coronary angiography.

8. Pulmonary thromboembolism (publication 5 outside scientometric indicators) - an overview of the PTE problem.

She is a member of the Board of Association of the specialists in echocardiography Varnaecho.

**Educational and teaching activities:**

Dr. Lilyana Mircheva was selected as a full-time Assistant Professor at the Department of Internal Medicine of the Medical University of Varna, in 2013, and since 2018 she is a Chief Administrative Assistant Professor in the First Department of Internal Diseases, MU-Varna.

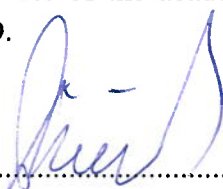
A record of teaching workload over the last 5 years indicates mean teaching load 176 hours (between 128 and 216 hours) of practical training and lectures with Bulgarian-language medical students, as well as theoretical lectures for specializing physicians in Cardiology.

According to this indicator, Dr. Mircheva fulfills and exceeds the required minimum according to the Law and the Regulations for Academic Development of MU-Varna.

**Conclusions:**

Dr. Lilyana Mircheva is an established professional in the field of internal diseases and cardiology, with extensive knowledge and skills especially in the field of heart failure, of imaging methods in cardiology and the risk factors for the development of cardiovascular diseases, with excellent professional training and proven skills. She has accumulated teaching experience and is loved and respected by her students and colleagues. Her scientific output is sufficient in volume, covers the minimum state requirements and shows a variety of interests, publications are in different journals. It complies with the requirements of the Academic Staff Development Act in the Republic of Bulgaria and the Rules for the Academic Staff Development in the Medical University of Varna. This gives me reason to recommend to the honorable members of the scientific jury to vote positively for of the academic position of Associate Professor to Dr. Lilyana Georgieva Mircheva, MD.

15.06.2021



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/Prof. Dr Yoto Trifonov Yotov, PhD/