

STATEMENT

Regarding the competition for academic position "Associate Professor"

Professional trend No 7.1 Medicine

Scientific specialty of Cardiology

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External jury member announced by order No RD-250 / 15.09.2022 of the Rector
of Medical University "Prof. Asen Zlatarov" – Burgas

General: The competition for academic position "Associate Professor" is announced by Burgas University "Prof. Asen Zlatarov" in State Gazette No 45 / 17.06.2022 in professional trend No 7.1 Medicine, Scientific specialty of Cardiology, Faculty Medicine, Department "Internal diseases", pharmacology, pediatrics, social medicine, medicine of calamity situations, computer technologies and Latin language". The documents of both candidates were submitted in time:

1. Dr. Konstantin Mihaylov Kostov, MD, manager of MC Medconsult, town of Pleven
2. Dr. Lilyana Georgieva Mircheva, MD, head of Cardiology ward – MHAT "Heart and brain", Burgas

The candidates will be presented in alphabetic order of their family names.

Candidate: Dr. Konstantin Mihaylov Kostov, MD

Biography data and career development: Dr. Konstantin Mihaylov Kostov was born on 12.08.1986 in the town of Pleven. In 2015 he completed his higher education in Medicine from Medical University – Pleven. He presents a diploma from 2009 for a bachelor in human physiology from Michigan State University, but I don't consider it an advantage over the other candidate. He obtained **specialty cardiology in 2020 and Scientific degree "Doctor" of scientific specialty cardiology** with a dissertation "Comorbidity, risk profile and biomarkers in hospitalized patients with

cardiac failure". He has postgraduate qualification and the corresponding certificates for non-invasive methods of cardiology: Holter ECG, Holter AP, VET, Echocardiography. He had participated in 4 scientific projects in the field of cardiology. From 2016 to 2020 he was a cardiologist at Second clinic of cardiology, UMHAT "Dr. Georgi Stranski", assistant in MU Pleven, Department "Cardiology, pulmology and endocrinology" UMHAT "Dr. Georgi Stranski", 2016 – 2017 assistant in MU Pleven, Department "Propaedeutics of internal diseases" UMHAT "Dr. Georgi Stranski", 2017 – 2020. From 2020 to 2022 he works as a physician – cardiologist at UCHAC – Pleven, and from 14.04.2022 he is a manager of MC Medconsult Pleven OOOD. He has excellent knowledge of English – written and spoken.

General description of the presented materials, critical remarks and recommendations. Dr. Konstantin Kostov has presented 38 scientific works enlisted for review, one of them a dissertation with an abstract, 3 publications for obtaining the scientific degree "Doctor", only in one of them Dr. Kostov is the first author. I did not find a monography issued. He presents 9 scientific publications, issued in scientific editions, referring the world data with scientific information, as he is not first or second author in neither of them. He has 25 publications and reports, published in referred magazines with scientific review. He is the first author of 5 of these publications, he is the only author of one, and second author of 8 articles. These facts demonstrate that Dr. Konstantin Kostov is not a leading author in the presented scientific documentation. He has participated in one scientific forum abroad, 3 in Bulgaria, and 4 scientific conferences in our country. The self-estimation of the candidate for meeting the national requirements for obtaining the academic position "Associate Professor" is 505.56 p. Not a single article or the dissertation are not presented with full volume in the set of materials and documents on paper or electronic variant. Only the abstracts of the scientific works in electronic format, therefore I can't make a wholesome assessment and conclusion if the common requirements of structuring the scientific works are met.

Citations: No Bulgarian citations of the works of Dr. Konstantin Kostov are found in the attached reference of Central medical library, and in Scopus data base 7525 citations are found, and in the ones of Web of Science – 3031, and both data bases are partially overlapping. Therefore, the exact number of citations can't be defined.

Impact factor. From the reference of Central medical library of the magazines attached according to the list of Dr. Konstantin Kostov have an impact factor from Journal Citation Reports – CLARIVATE and/or reference and indexed in the world data base with scientific information Scopus and/or Web of Science 133.68.

General characteristics of the scientific research and scientific application activity and main contributions.

The scientific interests of Dr. Konstantin Kostov are mainly in the following fields:

1. Cardiac failure
2. Metabolic syndrome
3. Biomarkers
4. Arterial hypertonia
5. Rhythm disorders

A great part of the scientific publications featuring Cardiac failure, Arterial hypertonia, Diabetes mellitus and metabolic syndrome examine the frequency and classifications of the metabolic syndrome in clinically healthy people.

An important contribution regarding cardiac failure has the analysis of the risk profile, comorbidity and prognosis in patients with cardiac failure with preserved, with intermediate reduction and reduced fraction of ejection (FE) of the left ventricle, analysis of the levels of Nt-proBNP in patients with cardiac failure and preserved function of left ventricle, IL-18 as a prognostic indicator I patients with cardiac failure.

Important contribution regarding Arterial hypertonia have the publications featuring the analysis of the turnover of elastin, collagen, matrix metalloproteinase-12, the inhibitor of, matrix metalloproteinase-3 and analysis of the imbalance of Angiotensin II/Angiotensin (1-7) in patients with Diabetes mellitus and Arterial hypertonia.

Teaching activities of the candidate: Dr. Konstantin Mihaylov Kostov is a full-time assistant for 4 years and 10 months – teaches students from II and IV course English tuition at MU Pleven, Faculty of Medicine. The academic workload for the period 2016 / 2017 up to 2021 / 2022 is as follows:

- 2016/2017 – 165.6 hours
- 2017/2018 – 147.5 hours
- 2018/2019 – 135 hours
- 2019/2020 – 516.6 hours

- 2020/2021 – 179.6 hours

Membership in other scientific organizations. The candidate is a member of Bulgarian Cardiologic association and Bulgarian cardiac and vascular association.

Candidate: Dr. Lilyana Georgieva Mircheva, MD

Biographic data and career development: Dr. Lilyana Georgieva Mircheva was born on 31.07.1979 in Varna. In 2004 she completed her higher education in Medicine at Medical University – Varna. She acquired a **specialty Cardiology in 2013, and in 2013 the scientific degree “Doctor” in scientific specialty Cardiology** with dissertation “Optimization of the patients with cardiac failure after dehospitalization”. She got a postgraduate qualification and the relevant certificates of non-invasive methods in cardiology: Ultrasound examination – fundamental level, Ultrasound examination – expert level, transthoracic, trans esophageal, stress-ultrasound examinations. She declares that she has not participated in scientific –research projects. From 2007 to 2022 she is a physician cardiologist at Second Cardiologic Clinic of UMHAT “Sveta Marina” – Varna, assistant of cardiology at MU Varna, ESS of Cardiology of Department of Internal diseases for the period 2013 – 2021. **She obtained the academic position “Associate Professor” with specialty “Cardiology” from 2021.** (Diploma No 0292 / 23.12.2021 from MU – Varna). The total teaching service of Dr. Mircheva at MU – Varna is 9 years and 1 month. From 01.04.2022 she is head of cardiology ward at MHAT “Heart and brain” – Burgas. She is fluent in written and spoken English.

General description of the presented materials, critical remarks and recommendations. Dr. Lilyana Georgieva Mircheva has presented 28 scientific works enlisted for review, one of them a dissertation with an abstract, **monograph of 167 pages “Congestion with cardiac failure” Varna: issued MU-Varna, 2020.** She has 1 publication for acquiring scientific degree “Doctor” with Dr. Mircheva as first author. She presents 8 scientific publications issued in scientific editions, referring the world data with scientific information, in 6 of them as a first author and in 1 as second author. She has 4 published chapters in a collective monograph and Dr. Mircheva is the first and only author of all of them. He has 14 whole text publications published in scientific magazines beyond the minimum scientific requirements for the administrative position “Associate Professor”, in 6 publications she is first author, and in two of them – second author. **This demonstrates the**

leading role of the candidate in the scientific works. The general volume of the published articles is 140 pages. She had 17 reports presented with a total volume of 17 pages. Analyzing the scientific production, I consider that the common requirements of structuring the scientific works are met.

According to the minimum required points from the groups of indicators for the administrative position "Associate Professor" Dr. Mircheva covers the points in the 6 groups of indicators. She has 643.75 points with minimum national requirements of 400 points and minimum requirements of MU – Burgas – 450 points.

I have no critical remarks and notes for the candidate.

Citations: From the reference attached Dr. Mircheva has citations of 6 of the articles with her participation. She has 5 citations by Bulgarian authors and 2 citations in magazines abroad, respectively by foreign authors.

Impact factor. The total impact factor of the published materials of the candidate is 57.066.

General characteristics of the scientific research and scientific application activity and main contributions.

The scientific interests of Dr. Mircheva are mainly in the following fields:

1. Cardiac failure
2. Cardio oncology
3. Infectious endocarditis
4. Hyperuricemia
5. Iron deficiency
6. Valve diseases
7. Imaging diagnostics of Ischemic disease of the heart.
8. Pulmonary embolism

The syndrome cardiac failure is thoroughly examined in the dissertation and a number of publications of Dr. Mircheva. Optimizations of the patient's care after their discharge from the hospital, the reasons and significance of the rehospitalizations on the occasion of cardiac failure, the role of BNP in the diagnosis, treatment and follow up of these patients, the medicamentous therapy of cardiac failure, the role of the ambulatory programs for the patients with chronic cardiac failure.

In an independent chapter of a collective monograph the candidate describes the connection and the general mechanisms, in which some common medicaments affect the pump function of the heart.

Dr. Mircheva presents her own experience of the application of the requirements for therapeutic behavior in patients with infectious endocarditis on the territory of UMHAT "Sveta Marina" – Varna.

Another field examined by the candidate is hyperuricemia and cardiovascular risk, as well as application of medicines for inhibition of xanthinoxidase in case of high level of urate in patients with cardiac failure.

The publications of Dr. Mircheva include examination of the frequency of iron efficiency in patients with cardiac failure and the problem of screening examination of iron deficiency in these patients in view of its early correction.

The candidate examines the main types of degenerative diseases of the mitral valve, as well as the clinical manifestation, diagnostics and the methods of treatment.

Other fields of the studies and publications of Dr. Mircheva are the imaging diagnostics in Ischemic disease of the heart and review of the causes, clinical symptoms, diagnostic methods and treatment of the patients with pulmonary embolism.

Teaching activities of the candidate: Dr. Lilyana Georgieva Mircheva is a full-time assistant for 5 years and 4 months, chief assistant for 3 years and 4 months and "Associate Professor" – 6 months at MU – Varna, Faculty of Medicine, ESS "Cardiology". Her total teaching service is 9 years and 1 month.

Membership in other scientific organizations. The candidate is a member of Bulgarian Cardiologic Association and European Society of Cardiology (ESC).

In conclusion:

The admitted candidates in the present competition Dr. Konstantin Mihaylov Kostov and Dr. Lilyana Georgieva Mircheva are young physicians who have the scientific degree "Doctor" for 2 years for the first candidate and 9 years – the second candidate.

They both had the academic position "assistant" for more than 2 years. On the basis of the complex comparative analysis performed of both candidates, including assessment of their:

1. Scientific research production – I consider that Dr. Mircheva has an advantage over Dr. Kostov, because she is a leading author of most of her publications and has a monograph issued.
2. The general characteristics of the scientific research and scientific application activity demonstrated the more variegated fields of interest of Dr. Mircheva.
3. Teaching experience – Dr. Kostov had the academic position assistant only with a total teaching service of 5 years. Dr. Mircheva had the academic positions assistant, chief assistant and Associate Professor – 9 years. This fact, combined with the greater professional experience of the specialty “Cardiology” (9 years Dr. Mircheva, 2 years – Dr. Kostov) showed greater clinical and scientific-organizational experience of Dr. Mircheva, which would contribute to the future development of Department “Internal diseases, pharmacology, pediatrics, social medicine, medicine of calamities, computer technologies and latin language” of MU – Burgas.

On the basis of statement made I consider as reasonable to propose Dr. Lilyana Georgieva Mircheva, MD for the academic position “Associate Professor” at the Department “Internal diseases, pharmacology, pediatrics, social medicine, medicine of calamities, computer technologies and latin language” of Burgas University “Prof. Dr. Asen Zlatarov” in professional trend 7.1 (Cardiology).

Varna
23.11.2022