

REVIEW

ON THE COMPETITION FOR THE ACADEMIC POSITION "ASSOCIATE PROFESSOR" AT THE MEDICAL UNIVERSITY OF PLOVDIV

I. Analysis of the candidate's career profile:

Dr. Bistra Yatseva graduated from the Medical University of Plovdiv, specializing in Medicine in 1988 with excellent grades. She obtained a specialty in Internal Medicine in 1992 and a specialty in Cardiology in 1996. She holds certificates for expert level in echocardiography, ergometry, and 24-hour Holter ECG. She has undergone specializations in the country in cardiology and echocardiography. She specialized in Stress Echocardiography in Nice, France in 1997. She started working as a physician in the Internal Medicine Department at the District Hospital in Panagyurishte in 1989. From 1993 to 1995, she worked as the head of the Cardiology Office and the Internal Medicine Department at the Third City Hospital in Plovdiv. After winning a competition in 1996, she was appointed as an assistant at the First Department of Internal Medicine, Cardiology Section at the Medical University of Plovdiv, where she still works. By 2008, she progressed through senior and chief assistant positions. In 2023, she obtained the scientific and educational degree "Doctor" in Medicine, defending a dissertation on "Contemporary Profile of Patients with Infective Endocarditis and Prognostic Indicators for In-Hospital Mortality."

She is proficient in English, her teaching load includes cardiology exercises for Bulgarian and foreign students in the fourth year, she is a lecturer under the Erasmus program, and participates with lectures for the Basic Course in Cardiology. She is a member of national and international professional organizations. She has over 27 participations in national and international scientific events. As the first author in a team of two articles, she received two awards at the XVIII National Congress of Cardiology (2024) – "The Best of the Bulgarian Cardiology Journal" and for a publication abroad with high IF "And We Have Given Something to the World." She is a member of the Academic Council of the Medical University of Plovdiv.

II. General description of the materials submitted for the competition:

The candidate has submitted all required documents and materials according to Article 108 of Section GU of the Regulations for Education at the Medical University of Plovdiv: Application to the Rector for participation in the competition; European format CV; Diploma for higher education with an appendix (notarized); Certified copy of the PhD diploma in the

scientific specialty of the announced academic position; Certificate of work experience in the relevant specialty and a report on the academic positions held; Academic transcript of the candidate's teaching load for the last three years; Copies of the latest attestation sheet; Abstract of the dissertation for the PhD degree; Monograph as the main habilitation work; Publications in scientific journals indexed only in Scopus and/or Web of Science; Non-refereed reviewed publications in journals; Citations and reviews of scientific publications indexed only in Scopus and/or Web of Science; Notarized diploma for specialty; Certificates for participation in national or intra-university scientific projects; Certificates for participation in international scientific projects; Certificates for training interns, specialists, and doctoral students from the relevant department of a higher education institution/scientific organization; Reference to scientific originality; Sample self-assessment for the scientometric requirements of the main units of the Medical University of Plovdiv; Declaration of originality and authenticity of the document, according to the sample; Copies of publications/Summary of publications in Bulgarian and English; Documents such as certificates, memberships, and qualifications.

III. **Evaluation of the candidate's scientific works for overall academic development:**

Dr. Bistra Yatseva participates in the competition with a total of 30 scientific works, including one dissertation, one monograph, one chapter from a collective monograph, and 27 publications. Of all the publications, 16 are in refereed journals in Scopus and/or Web of Science, with 9 of them having an impact factor. They are distributed as follows - in **Q2**: 5 articles; in **Q3**: 2 articles; and in **Q4**: 9 articles. The total IF is **21.98**. Additionally, 11 publications are presented in non-refereed journals with scientific review.

The candidate's scientific activity has a high scientific contribution in the field of Cardiology. The research is focused on the following key areas of interest:

- Infective Endocarditis
- Physiology, pathophysiology and clinical significance of exercise response and training in patients with heart failure
- Cardiovascular risk and risk factors
- Coronary Artery Disease
- Miscellaneous Topics (Varia)

Infective Endocarditis: This topic was originally developed in a dissertation entitled "Current profile of patients with infective endocarditis and predictors of in-hospital mortality." The

research has been further expanded in numerous scientific publications (G 7.2, G 7.3, G 7.4, G 7.10, G 7.11, G 7.12, G 8.1, G 8.2, G 8.3, G 8.5, G 8.6). The monograph "Platelets - Prognostic Significance in Cardiovascular Diseases" examines why thrombocytopenia and related indices are poor prognostic markers in infective endocarditis.

Original contributions:

- The largest retrospective analysis to date was conducted in Bulgaria, involving 270 patients diagnosed with infective endocarditis over a 17-year period. The study is unmatched in the national literature in terms of number of patients, observation period, and number of variables analyzed (160 clinical, laboratory, instrumental, and microbiological).
- For the first time in Bulgaria, the Charlson Comorbidity Index was studied in patients with infective endocarditis and identified as an independent predictor of in-hospital mortality.
- The discriminatory power of platelet levels in predicting patient outcomes (survival/death) was analyzed for the first time.
- An association was found between elevated mean platelet volume (MPV) and MPV/PLT ratio and increased in-hospital mortality.
- Early surgical intervention was shown to be a protective independent predictor of in-hospital mortality.
- Conversely, failure to perform early surgery when indicated was identified as a strong independent predictor of in-hospital death.

Rare clinical cases were included, such as infective endocarditis with acute neurological onset, septic shock, isolated right-sided endocarditis, and non-bacterial endocarditis.

Physiology, Pathophysiology, and Clinical Significance of the Response to Exercise and Exercise Training in Patients with Heart Failure. The following original contributions were made in this area:

- For the first time in Bulgaria, cardiopulmonary functional reserve in patients with chronic heart failure (CHF) was assessed both at rest and during exercise.
- It was found that CHF patients in NYHA functional class II and III have significantly reduced spirometric and diffusion parameters, respiratory muscle strength and ventilatory efficiency during physical activity.

- For the first time in the country, results of exercise training in patients with CHF have been reported, showing statistically significant improvements in peak oxygen consumption, peak workload, anaerobic threshold, oxygen pulse, rate-pressure product (RPP), ventilation and test duration - observed only in the trained group.

Cardiovascular Risk, Risk Factors and Coronary Artery Disease. Research in this area includes data on the prevalence of familial hypercholesterolemia among high- and very high-risk cardiology patients in Plovdiv and the surrounding region; role of statins in acute coronary syndrome; evaluation of the effect of Trimetazidine in reducing postoperative myocardial ischemia-reperfusion Injury.

Additional contributions.

Additional value is provided by studies on Incidence and management of COVID-19, diagnosis and management of ulcerative colitis, rare clinical cases accurately documented and discussed. The hypotheses, clinical interpretations, and conclusions are sound, original, and have strong scientific and practical potential.

She has over 27 participations in national and international scientific events. As the first author in a team of two articles, she received two awards at the XVIII National Congress of Cardiology (2024) – "The Best of the Bulgarian Cardiology Journal" and for a publication abroad with high IF "And We Have Given Something to the World." She is a member of the Academic Council of the Medical University of Plovdiv.

IV. Evaluation of the monographic work or equivalent publications submitted for the competition for "ASSOCIATE PROFESSOR" by the candidate

The candidate has published a monograph: "Platelets - Prognostic Significance in Cardiovascular Diseases," University Publishing House "Paisii Hilendarski," 162025 ISBN 978-619-281-024-5, published in 2025. The topic of the monographic work is highly relevant and interdisciplinary. Contemporary research provides evidence for the involvement of platelets not only in the process of thrombogenesis but also in various other pathophysiological processes and diseases such as atherogenesis, protection of the body from infections, oncogenesis, Alzheimer's disease, depression, multiple sclerosis, autoimmune, liver, and other diseases. A special focus in the monograph is the prognostic significance of platelets in cardiovascular diseases, deeply examining the relationship between platelets and atherosclerosis, the importance of platelet indicators and indices for the prognosis of coronary disease, diabetes mellitus, atrial fibrillation, stroke, peripheral vascular disease, severe

infections. The author's significant contribution to the prognostic value of platelets and their indices in infective endocarditis is highlighted in a separate section of the monographic work. These results represent a substantial scientific contribution and carry specific messages for daily clinical practice. The monograph is unparalleled in national literature and is a valuable source of information for specialists in cardiology, intensive care, infectious diseases, clinical hematology, etc., as well as for specializing doctors and young scientists.

V. Reflection (citation) of the candidate's publications in national and international literature (publication image).

The candidate has attached a citation report from the Central Medical Library - Medical University, Sofia to her application. The report shows a total of 41 citations. Of these,

- 21 citations are in journals indexed in Scopus and/or Web of Science,
- 2 citations are in collective monographs, and
- 16 citations are in non-indexed journals with scientific peer review.
- there are 1,140 citations in Scopus and 1,066 in Web of Science where the author is listed as a collaborator, according to the available records.
- 9 reviews in journals indexed in Scopus and/or Web of Science. Documents from the Plovdiv Medical University and Web of Science were presented.

VI. Comprehensive, qualitative assessment of the teaching and methodological activities, including scientific supervision of students, doctoral students, and specialists.

Dr. Bistra Yatseva, PhD has submitted documented evidence of her teaching workload as follows:

- Academic year 2021/2022: 300 hours of classroom teaching and 70 hours of extracurricular academic activity
- Academic year 2022/2023: 405 hours of classroom teaching and 160 hours of extracurricular academic activity
- Academic year 2023/2024: 415 hours of classroom teaching and 190 hours of extracurricular academic activity

She teaches theoretical and practical courses to 4th-year medical students in both Bulgarian and English. She is a member of examination committees and lecturers under the Erasmus program, contributing to the core curriculum in Cardiology. She also delivers cardiology

lectures for the Physician Assistant program and for the Medical Software Engineering specialization. By Order No. 837/31.10.2022, Dr. Bistra Yatseva was appointed as a mentor for a resident specializing in Clinical Cardiology.

Participation in Research Projects

Dr. Yatseva has submitted documentation for participation in the following **intra-university research projects**:

- Project No. R-3012 DPD-06/2024: “Localization of Ischemic Stroke in Correlation with Subclinical Cardiovascular Findings”
- Project No. 14/2022: “Cardiovascular Changes Following COVID-19 Infection”
- Project No. NO-14/2015-2016: “A Contemporary Perspective on Hypercholesterolemia – One of the Most Common, Underdiagnosed, and Untreated Genetic Disorders Worldwide – A Pilot Study on Its Prevalence in Plovdiv and the Region”

Participation in International Research Projects

Dr. Yatseva is also involved in the following international research initiatives:

- Project “AFFIRMO” – Atrial Fibrillation Integrated Approach in Frail, Multimorbid and Polymedicated Older People, funded under Horizon 2020 (Grant Agreement No. 899871, starting 01.05.2021)
- Project “Central/Eastern Europe Quality of Care Centers”
- Project “Global Registries and Surveys Programme (GRASP)” – a multicenter, international, non-interventional research initiative by the European Society of Cardiology (ESC) aimed at collecting real-world evidence

Additional Roles

Dr. Yatseva serves as the Continuing Medical Education (CME) coordinator for her department. She is also a member of the Academic Council at the Medical University of Plovdiv.

VII. Critical notes and recommendations.

No critical remarks. As a recommendation, I would give the idea for future joint work with doctoral students to analyze prospective studies due to their greater informative

value. To participate in the author's team in publishing textbooks for students and postgraduates.

VIII. Overall assessment of the candidate's compliance with the minimum national requirements

Group of Indicators	Content	Associate Professor Dr. Yatseva, PhD	
		(points)	(points)
A	Indicator 1	50	50
B	Indicator 2	-	-
C	Indicators 3 and 4	100	100
D	Sum of indicators from 5 to 9	200	241.75
E	Sum of indicators from 10 to 12	100	550
F	Sum of indicators from 13 to 22	60	215
G	Teaching activity and academic position	300	610
Total		810	1766.75

I am of the opinion that the candidate fully meets the requirements, mandatory condition and scientometric indicators described in the Regulations for Academic Development at the Medical University of Plovdiv: art. 2b, paragraphs 2 and 3, respectively to the requirements under art. 2b, paragraph 5 of the Law on the Development of the Academic Staff in the Republic of Bulgaria, and the specific requirements for the Medical University of Plovdiv by fields and for units with clinical activities

IX. Conclusion:

I firmly consider that Dr. Bistra Vladimirova Yatseva fully meets and complies with the mandatory and specific conditions and scientometric criteria for the award of the academic position of "ASSOCIATE PROFESSOR". I recommend that the esteemed Scientific Jury vote positively for Dr. Bistra Vladimirova Yatseva, PhD, for the award of the academic position of "Associate Professor" for the needs of the First Department of Internal Medicine, Cardiology Section at the Medical University of Plovdiv.

Date:

Signature:

Заличено на основание
Чл.5 §1, б. "В" Регламент (ЕС)2016/679

/Prof. Dr. Ludmila Vladimirova-Kitova, MD/