

# **REVIEW**

**UNDER PROCEDURE FOR TAKING THE ACADEMIC POSITION  
“ASSOCIATE PROFESSOR”  
SPECIALTY „PNEUMOLOGY AND PHTHISIATRIA“  
PROFESSIONAL AREA 7.1  
0.5 PERMANENT POSITION FOR THE NEEDS OF EDUCATIONAL SECTOR  
FOR PULMONARY DISEASES AND ALLERGOLOGY,  
FIRST DEPARTMENT OF INTERNAL DISEASES, FACULTY “MEDICINE”  
AND  
0.5 PERMANENT POSITION FOR THE NEEDS OF CLINIC “PULMONARY  
DISEASES” AT UNIVERSITY MULTI-PROFILE HOSPITAL FOR ACTIVE  
TREATMENT “ST.MARINA” JSC VARNA**

The procedure is announced in State Gazette No. 17/26.02.2021. The scientific jury was determined by Order No. P-109-187 dated 26.04.2021 of the Rector of MU Varna.

The only participant in the announced procedure is **Dr. Valentina Dimova Dimitrova, MD.**

## **Professional Qualification**

Dr. Valentina Dimitrova graduated with a master's degree in medicine in the Medical University "Prof. Dr. Paraskev Stoyanov" Varna in 1995 with an average grade of 5.75 in the state exams. She was a resident doctor at the Center for Emergency Medical Care of Shumen and at the Department of Internal Medicine of Varna Transport Hospital. Since 2000 she has been working at the Clinic of Pulmonary Diseases, Intensive Care Unit, of the University Multi-profile Hospital for Active treatment "St. Marina" Varna, first as a resident physician, and since 2011 as an assistant doctor. Since 2019 she has been a senior assistant at the First Department of Internal Medicine, Board of Pulmonary Diseases and Allergology.

She was awarded an educational and scientific degree "Doctor" in the specialty "Pulmonary Diseases" after defending a dissertation on "Clinical and prognostic characteristics of patients with chronic post-thromboembolic pulmonary hypertension (CTEPH)" in 2018. Dr.Dimitrova has two specialties - internal medicine (2002) and pneumology and phthisiatria (2006). She also acquired a qualification for highly specialized activity in bronchoscopy (2010). In the years that followed, she attended workshops on interstitial diseases, bronchology, spirometry, presentation skills and academic teaching.

She participated in the research project No. 16030 "Prognostic and diagnostic markers in patients with pulmonary thromboembolism", approved by the Science Fund at MU "Prof. Dr. Paraskev Stoyanov" Varna with registration No. НН-2/05.12.2016 at MU Varna. Plasma concentrations of NT pro BNP were assessed in patients with right ventricular dysfunction after PTE". This makes it

possible to screen and refer patients for highly specialized research in order to individualize the therapy, incl. surgical treatment.

She speaks Russian and English and has the necessary computer literacy.

She is a member of the Bulgarian Society of Pulmonary Diseases, whose secretary she was for 4 years, as well as of the European Respiratory Society.

### **Scientific activity**

Dr.Dimitrova has presented information about her scientific publications, as follows:

1. Dissertation for the award of educational and scientific degree "Doctor"
2. Monographs, textbooks and manuals (5 pcs.)
3. Full-text publications in foreign and Bulgarian scientific journals and collections (26 issues, of which 2 in international scientific journals)
4. Participation in forums in Bulgaria, with published abstracts (21 pcs.)
5. Participation in international forums with published abstracts (13)

Dr. Dimitrova's scientific research interests are in the field of pulmonary thromboembolism, pulmonary arterial hypertension, chronic post-thromboembolic pulmonary hypertension, non-invasive ventilation in acute and chronic respiratory insufficiency and bronchology.

In her dissertation on "Clinical and prognostic characteristics of patients with chronic post-thromboembolic pulmonary hypertension (CTEPH)" she, for the first time in Bulgaria, determined the frequency of CTEPH. A scientific analysis of the main risk and prognostic factors for CTEPH has been made. Early assessment methods, biomarkers and key parameters (echocardiography and dyspnea scales, 6 minute walking test) for follow-up of patients with CTEPH are shown. The original algorithm for diagnosis and follow-up of patients with CTEPH is of practical contribution.

In another publication on the subject, Dr. Dimitrova describes the significance of NT pro BNP for diagnosis and follow-up in patients with chronic postthromboembolic pulmonary hypertension.

In the monograph "Pulmonary thromboembolism - a predictable mystery", Dr. Dimitrova summarizes information accumulated in the medical literature in recent years. The current recommendations for assessment of clinical probability, diagnosis and decision-making for individualized treatment in patients with acute PE are presented. There is also a summary of the ten-year experience of the Intensive Respiratory Department at the Clinic of Pneumology and Phthisiatry of the University Hospital "St. Marina" in the diagnosis and treatment of this disease. A register of patients with acute, recurrent PE and DVT was made for the first time, which includes 832 patients

Dr. Dimitrova is a co-author of a guide to home oxygen therapy aimed at patients with chronic pulmonary disease. The main diseases that lead to the development of chronic respiratory insufficiency are presented in a

comprehensible form, as well as the physiological role of oxygen and the consequences for the body of its decrease in the blood and tissues. The indications for oxygen therapy, different types and types of devices that deliver oxygen at home are described.

She also participates in a team of authors who wrote a chapter for a textbook on pulmonary diseases on the topic of pulmonary arterial hypertension with a focus on internists and pulmonologists. The current changes in the classification, the latest data on the frequency, morbidity and mortality, the guidelines for treatment are presented. She is also the co-author of a chapter in a textbook on internal medicine for health care professionals.

Among the full-text publications in Bulgarian and foreign scientific journals and collections, two articles in English, discussing the current thesis on COPD and comorbidities, make an impression. Author's data on the frequency, severity and connection with the underlying inflammation, pathophysiological mechanisms, treatment schemes are presented.

Another important direction, reflecting the teamwork among pulmonologists in Varna, are breathing disorders during sleep. The epidemiology, pathogenesis and pathophysiology of upper respiratory resistance syndrome, the criteria for diagnosis, the main clinical features and the role of CPAP therapy are described.

There are published articles on the behavior in case of upper and lower respiratory tract infections in an outpatient setting, biomarkers and metabolic profiling in patients with community-acquired pneumonia, pulmonary and non-pulmonary complications, guidelines for behavior in nosocomial pneumonia. Clinical cases of pulmonary tuberculosis, clinical analysis of patients treated with mechanical ventilation in the Intensive Care Unit, etc. have been published.

21 participations in national scientific forums with published abstracts were presented, as well as 13 participations in international congresses and conferences with published abstracts.

From the presented academic reference, prepared by the Library of MU Varna, it is evident that Dr. Dimitrova has registered active scientific profiles in Google Scholar, Research Gate, ORCID, ResearcherID, eLibrary. According to this reference, she collects 425.5 points from dissertation, monograph, publications and reports published in scientific journals referenced and indexed in world-famous databases with scientific information, published in non-referred journals with scientific review, citations (2 in refereed and indexed in world-famous databases and 4 in non-refereed journals with scientific review), citations beyond the minimum requirements. This point sum exceeds the requirements according to the Regulations for the development of the academic staff of MU Varna.

The academic reference on impact factor of the journals in which Dr. Dimitrova has publications shows 16.56 individual impact factor

### **Teaching activity**

From the presented certificate, prepared by the Human Resources Department of MU Varna, it can be seen that for the period from 2011 to 2021 Dr. Valentina Dimitrova has a total teaching experience of 9 years 5 months and 13 days. For the last 5 years (from 2015 to 2020 inclusive) she has an average annual classroom employment of 171 teaching hours. Dr. Dimitrova leads practical exercises of Bulgarian language education at MU Varna.

It is obvious that Dr. Valentina Dimitrova is a high-expertise doctor, lecturer and scientist. She meets the criteria according to the Regulations for the development of the academic staff of MU Varna for awarding the academic position of "associate professor". I suggest to the esteemed jury to vote in her favor.



16.07.2021

Assoc.prof.Dr.Yavor Ivanov, MD

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