

STATEMENT OF OPINION

prepared by

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Regarding: A procedure for holding the academic position "Professor" in the field of higher education 7. "Health and sport", professional subfield 7.1. "Medicine", scientific specialty "Pneumology and Phthysiatry", for the needs of the First Department of Internal Medicine, ES Pulmonary Diseases and Allergology at the Faculty of Medicine of Medical University - Varna and clinical base at Saint Marina University Hospital - Varna.

The competition was published in the "State Gazette" no. 28 of 29.03.2023 and by Order No. R-109-288/26.05.2023 of the Rector of MU-Varna, I have been selected as a member of the Scientific Jury.

A single candidate has been allowed to participate in the current competition for the academic position "Professor" in the Medical University of Varna. The candidate is Assoc. Prof. Dr. Diana Petkova Gospodinova-Valkova, MD, PhD. She submitted all the required documents in accordance with the requirements of The Act for the Development of the Academic Staff in the Republic of Bulgaria and The Regulations for the Terms and Conditions for Acquisition of Academic Degrees and Holding of Academic Positions in Medical University - Varna.

I. Career development of the candidate.

Assoc. Prof. Dr. Diana Petkova Gospodinova-Valkova, MD, PhD graduated her education with a gold medal for excellent success at the First Language High School - Varna, studying English and German.

She obtained the educational degree "Master" in Medicine at the Medical University of Varna in 1990 (diploma No. 001665/1990). She is first in success in the graduating class "Class 1990" at the Medical University of Varna.

From 1990 to 1994, she was a resident in the Internal Medicine Department of Hospital for active treatment in Shumen and in Provadia. From 1994 to 2011, she successively held the academic positions of "assistant", "senior assistant" and "principal assistant" at the Department of Pulmonary Diseases of the University of Varna. Since 2011, she has been elected as an "associate professor" at the Department of Pulmonary Diseases with a clinical base at the Clinic for Pulmonary Diseases of the Saint Marina University Hospital - Varna. During this period, Assoc. Prof. D. Petkova was the head of the department of Sleep Medicine and Non-Invasive Ventilation at the First Department in Saint Marina University Hospital- Varna.

Assoc. Prof. Petkova acquired a specialty in "Internal Diseases" in 2001 (diploma No. 007395/15.02.2001) and "Pneumology and Phthysiatry" (diploma No. 008411/18.06.2003) - indicator E 15 = 80 points.

In 2009, she obtained the educational and scientific degree "doctor" (diploma №33365/22.06.2009), after successfully defending a dissertation on the topic: "Breathing disorders during sleep: assessment of the risk and clinical effectiveness of the application of non-invasive ventilation nCPAP, BIPAP, VPAP at home" - indicator A1 = 50 points.

Assoc. Prof. Petkova conducted an individual course "Social Medicine and Health Management" (2012) and is a Quality Management Auditor with a Diploma from EFQM, Zurich, Switzerland. She

completed training in quality management with a Certificate from the EFQM Foundation - Brussels and training in Bern - CEO, EFQM. She is the chairman of the commission for acquiring legal capacity to perform the highly specialized activity "Polysomnography in sleep and wakefulness disorders", Varna Medical University, and holds a certificate for this highly specialized activity.

She has excellent teamwork skills and has many years of experience working and leading a team. She has excellent written and spoken English, German and Russian. She has computer skills, working excellently with Windows operating systems (9x, XP, Vista, 7), MS Word, MS Excel, MS PowerPoint.

Assoc. Prof. D. Petkova is the head of the of the of the Board of the Department of Pulmonary Diseases and Allergology at the Medical University - Varna. She is a member of the Bulgarian Medical Association, the National Control Commission, the National Ethics Commission, the Board of the Bulgarian Medical Association - Varna and a chairman of the Committee on Professional Ethics of the Bulgarian Medical Association - Varna. Assoc. Prof. Petkova is a member of the Bulgarian Respiratory Society and the current Chairman of the Board. She is a National Delegate of the European Respiratory Society (ERS). She is also a member of national Expert Board on Pulmonary Diseases at the Ministry of Health, of the Expert Council on Pulmonary Diseases and Tuberculosis at the Ministry of Health, of the National Coordinating Council for improving seasonal influenza vaccination, of the Union of Scientists in Bulgaria - Varna branch and of the Swiss Society for Quality Management in Healthcare. She is a member of the Board of the Heart-Lung Association - Varna and is an Expert of the National Health Insurance Fund.

Assoc. Prof. Petkova was the Chairman of the Quality Management and Risk Management Committee at Saint Marina University Hospital - Varna from 2000-2016. She is the chairman of the drug prescribing committee under Regulation 34 for patients with pulmonary arterial hypertension, IPF and severe asthma at the Saint Marina University Hospital – Varna. She is an associate of the Center for Quality Management of Medical University - Varna.

II. Scientific research activity

For the current competition, Assoc. Prof. Dr. Diana Petkova Gospodinova–Valkova, MD, PhD, presented a monograph on the topic: "Home oxygen therapy: *conditio sine qua non*. Varna: NIRA Communications; 2023. 210 pp. ISBN: 978-954-92663-8-2" (B3 = 100 points) and 46 scientific publications, other than those for obtaining the title "Doctor" (2009) and the academic position of "Associate Professor " (2011), distributed as follows:

1. Twenty-six publications and reports published in scientific journals, referenced and indexed in databases with high scientific information (one in print). In five publications Assoc. Prof. Petkova is the first/last author - G7 = 156.2 points, with a minimum requirement of 80 points.

2. Twenty publications and reports published in non-refereed journals with scientific review or published in edited collective volumes. In 12 publications Assoc. Prof. Petkova is first/last or single author) – G8 = 240 points.

Assoc. Prof. Petkova collects a total of 396.6 points from indicator G5-9 with the minimum required 200 points.

The candidate also presents 23 full-text publications in scientific journals, beyond the minimum scientometric requirements for holding the academic position "Professor" (2013 - 2022) - 355.5 points. There are 49 participations in National Scientific Forums and 18 in Scientific Forums abroad.

From the presented academic report on the citations from MU - Varna (Exh. No. 192/23.05.2023) it was established that Assoc. Prof. Dr. Diana Petkova has 52 citations in scientific publications, referenced and indexed in world-famous databases with high scientific information or in monographs and collective volumes - D10-12 = 780 points. Self-citations are not included in the references.

Assoc. Prof. Dr. D. Petkova from 2002 to 2016 was the coordinator of the International Project between the Saint Marina University Hospital - Varna and Inselspital, Bern. She is a founder and chairman of "Lung League Varna" – a non-profit association. This is a joint project with Lung League

St. Gallen, Switzerland. She is a head of the Quality Management sub-project, within which in Saint Marina University Hospital - Varna and MU-Varna, a "Business Excellence" model has been introduced and other projects have been implemented.

The two institutions are the first in Bulgaria with a quality certificate from the EFQM foundation based in Brussels. Assoc. Prof. Dr. Petkova is initiator and coordinator of a project between Saint Marina University Hospital - Varna and KS St. Gallen, Switzerland, within which a center for "Sleep Medicine and Noninvasive Ventilation" was created and established. Assoc. Prof. Dr. D. Petkova leads the center since 2004 until now. Assoc. Prof. Dr. D. Petkova is initiator of the project "Pulmonary Arterial Hypertension" in collaboration with the Pulmonary Hypertension Center of the University in Zurich, Switzerland for opening of an interdisciplinary center at Saint Marina University Hospital - Varna.

Assoc. Prof. Petkova was the scientific supervisor of Dr. Valentina Dimova Dimitrova for a successfully defended PhD dissertation - E14 = 40 points and is the scientific supervisor of six more PhD students who work on their topics (minimum required for this indicator 80 points). She has participated in 5 national scientific GRANT projects, being the head of each one - E18 = 150 points and has participated in three publications (two university textbooks and one student book - indicator E 20 = 4.7 points.). The candidate takes an active part in training of interns and specialists - E22 = 30 points.

The total points of indicator E13-22 is 304.7 points.

She is moderator and guest speaker at Berner Schlaf-Wach-Tage 25. - 27. Oktober 2017, Inselspital Bern. Schlafbezogene Atmungsstörungen. Daten von der schweiz.-bulgarischen Vergleichstudie. Kooperationsprojekt KS St. Gallen, LL St. Gallen, Universitätsspital Sv. Marina – Varna, Diana Petkova.

She participates in the editorial board of the journals: „ASKLEPIOS international annual of history and philosophy of the medicine“, „GP Medic“, „Medic Plus“ and „Thoracic medicine“.

Assoc. Prof. Petkova has a number of specializations in the period 1997-2023: courses organized and certified by the Board of the Bulgarian Respiratory Society (spirometry, vasculitis, IPF, granulomatosis); ILD Research Educational Meeting, Malmö; ILD Expert Meeting, Vienna – Austria; IPF in Basel - Switzerland and Munich - Germany; Annual specializations at the Center for Sleep Medicine at Cantonal Hospital St. Gallen – Switzerland; Intensive summer course "Epidemiology and Biostatistics in Public Health"; Training in Salzburg - Austria, Salzburg-Cornell Seminar "TB in Eastern Europe"; Training in an ERS course in the fields of sleep medicine and non-invasive ventilation, Glasgow 4-8 Sept. 2004.

The scientific contributions of Assoc. Prof. Dr. Diana Petkova Gospodinova–Valkova covers the following fields of medicine:

1. Sleep-related breathing disorders

2. Non-invasive ventilation - a prospective observation of patients undergoing non-invasive ventilation was carried out in different modes: CPAP, BiPAP, VPAP, APAP. Treatment monitoring was carried out, short-term and long-term compliance to the treatment was tracked and analyzed. An algorithm for training and control of non-invasive ventilation treatment in patients with breathing disorders during sleep has been proposed and implemented.

3. Home oxygen therapy. The concept refers not only to the administration of oxygen as long term therapy, but also for a short period of time: for administration at night, for palliative administration, ambulatory or intermittent treatment. Excludes the use of oxygen for therapeutic and emergency purposes. The monographic work "Home oxygen therapy: conditio sine qua non" summarizes the knowledge and experience accumulated so far in Bulgaria and offers a comprehensive overview of the science-based strategy for introducing, implementing and monitoring the effects of long-term home oxygen therapy, devices, modalities, indications, contraindications and models of application.

4. Pulmonary hypertension - in the scientific works presented for participation in the competition by Assoc. Prof. Petkova, the subject of the rare disease pulmonary arterial hypertension occupies a significant place. In addition to the data documenting the application, for the first time in our country,

in addition to targeted treatment of patients with pulmonary arterial hypertension, the team's scientific developments include the study of survival, quality of life and clinical effectiveness of the treatment applied to this group of patients. Together with an international team of authors in a refereed and indexed journal, an article giving methodological guidelines and various tools for researching the quality of life in patients with idiopathic and post thromboembolic pulmonary hypertension is presented.

5. Pulmonary thromboembolism (PE) - the group of publications, in this direction, are related to a large-scale retrospective study on PE and post-thromboembolic pulmonary hypertension in our country. The Varna cohort of patients is part of the scientific developments of the team, and the data are summarized in the PhD work of Dr. Valentina Dimitrova – a PhD student of the candidate in the competition.

6. Idiopathic pulmonary fibrosis (IPF) - clinical presentation, diagnosis and differential diagnosis, treatment and follow-up. Several articles and scientific reports summarize the current knowledge of interstitial lung diseases and IPF in particular, and, along with a commentary on clinical presentation, research methods and diagnosis, present the experience in the follow-up and monitoring of patients with this pathology. The results of the study are presented at national forums with international participation.

7. Other areas of research interests of Assoc. Prof. D. Petkova are pulmonary tuberculosis (epidemiology, risk factors, resistance), broncho-obstructive diseases - COPD and Bronchial asthma (epidemiology, clinical features and treatment), infectious lung diseases (pneumonia with epidemiological data and clinical characteristic), clinical characteristics, features of course and treatment of pulmonary manifestations in COVID-19 and others.

Assoc. Prof. Petkova was the chairman of the Organizational and Scientific Committees of the 5th, 6th, 7th, and 8th National Congresses of the Bulgarian Respiratory Society with international participation. She was an organizer and lecturer at Summer Schools and courses on pulmonary diseases with international participation. She was moderator and lecturer at national, international and regional scientific meetings. Assoc. Prof. Petkova takes an active part in publishing scientific articles in national and international specialized journals, co-authoring medical textbooks and manuals. She participated in multicenter clinical trials as investigator and principal investigator in the field of pulmonary diseases.

III. The teaching activity of Assoc. Prof. Dr. Diana Petkova began in 1994 and over the years she established herself as an excellent teacher. The rich teaching experience summarizes it in a scientific-methodical guide for the participation of students in scientific forums.

The teaching activity is in the direction of classroom employment with training of students (exercises and lectures in Bulgarian), practical and theoretical classes with intern doctors, doctoral students and specialists, participation in examination committees of students and in examination Internal Medicine committees.

The academic report on the study load of Assoc. Prof. Dr. D. Petkova during the last four academic years shows an average annual load of 208.25 study hours. (under a regulation by decision of MU-Varna, reflected in Protocol No. 30/11.04.2011 of 99 study hours).

Conclusion

I know Assoc. prof. Dr. Diana Petkova Gospodinova–Valkova, MD, PhD as an experienced scientist, established teacher, doctor and administrative manager. She has mastered and successfully applies in her work the modern diagnostic and therapeutic methods in pulmonary pathology. She carries out with high professionalism intra-clinical, inter-clinical and outpatient consultation activities. She is taking an active part in the medical and diagnostic activities of the medical institution. She has very good communication skills, which help her in her medical-diagnostic and scientific-teaching activities.

The scientific production of Assoc. prof. Dr. Diana Petkova Gospodinova-Valkova, MD, PhD, in terms of volume and quality, exceeds many times the national minimum requirements for the academic position "Professor" in the scientific specialty "Pneumology and Phthysiatry", according to the Act for

the Development of the Academic Staff in the Republic of Bulgaria and The Regulations for the Terms and Conditions for Acquisition of Academic Degrees and Holding of Academic Positions in Medical University - Varna

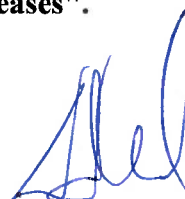
Reference according to The Regulations for the Terms and Conditions for Acquisition of Academic Degrees and Holding of Academic Positions in Medical University - Varna for the academic position "Professor" of Assoc. Prof. Dr. Diana Petkova Gospodinova–Valkova, MD, PhD:

Groups of Indicators	Minimum total number of points	Candidate points
Indicator A1	50	50
Indicator B3	100	100
Indicator G (from 5 to 9)	200	396.6
Indicator D (from 10 to 12)	100	780
Indicator E (from 13 to 22)	100	304.7
Total	550	1631.3

Based on the presented data and their analysis, I give my positive opinion and confidently recommend to the respected members of the Scientific Jury to vote positively and to award Assoc. Dr. Diana Petkova Gospodinova–Valkova, MD, PhD with the academic position "Professor" in Science specialty "Pneumology and Phthisiatry" for the needs of the First Department of Internal Diseases, ES Pulmonary Diseases and Allergology at Medical Faculty of Medical University - Varna with a clinical base in Saint Marina University Hospital – Varna, Clinic "Pulmonary Diseases".

10.07.2023 г.,
Sofia

Member of the scientific jury:



(Prof. Dr. D. Kostadinov, MD, PhD)