

OPINION

By **Prof. Dr. Vania Milocheva Youroukova**, MD, Department of Pulmonary Diseases, UMBAL "St. Iv. Rilski ", Faculty of Medicine at the Medical University - Sofia, member of the scientific jury for the competition for the academic position of "professor" in area 7. "health care and sports", direction 7.1 "medicine", scientific specialty "Pneumology and phthisiology", for the needs of the Academic Sector "Pulmonary Diseases and Allergology", First Department of Internal Medicine, Faculty of "Medicine" and Clinic of Pulmonary Diseases at UMBAL "St. Marina", published in the "State Gazette", N 28 of 28.03.2023.

The opinion was prepared on the basis of Order No. R-109-288/26.5.2023 of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov"-Varna and is in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Staff at the Medical University - Varna.

Candidate for the announced competition is **Assoc. professor Dr. Diana Petkova Gospodinova-Valkova**, and at a meeting of the scientific jury held on 09.06.2023, with Protocol No. 1, it was documented that the scientific production and output correspond to the minimum national requirements under Article 2b, Paragraph 2 and Paragraph 3 of the Law on the Development of Scientific Staff in the Republic of Bulgaria and are allowed to participate in the competition.

I. Brief biographical data of the applicant

Assoc. professor Dr. Diana Petkova graduated from higher education "medicine" at the Medical University - Varna in 1990. For the period 1990-1994 she is a physician in the Internal medicine department in Shumen and Provadia Hospital. In 2001, she acquired a specialty in internal medicine, and in 2003 - specialty of pulmonary diseases. Since 1994 she is successively an assistant, senior assistant and chief assistant at the Department of Pulmonary Diseases of the Medical University of Varna. Since 2009 she has been awarded a doctorate in the scientific specialty "Pulmonary diseases" after a successfully defended 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 in home conditions." Varna; 2008. Since 2011, she is an Associate professor at the Pulmonary Diseases Clinic, Faculty of Medicine at the Medical University of Varna. Since 2019, she is the Head of the Department of Pulmonary Diseases and Allergology, Varna Medical University.

She is fluent in written and spoken English, German and Russian languages.

II. Research activity

1. Publications

Assoc. professor Dr. Diana Petkova submits a habilitation work - monograph "Domestic oxygen therapy: conditio sine qua non" for participation in the competition. Varna: NIRA Communications; 2023 and 46 scientific publications, after acquiring the academic position "Associate professor". Of these, 26 are publications and reports in journals that are referenced and indexed in world-renowned databases of scientific information and 20 articles in non-refereed peer-reviewed journals. Also presented are 23 other full-text publications in scientific journals and collections beyond the minimum scientometric requirements for holding the academic position "professor" title and participation in the publication of 2 university textbooks.

For participation in the competition for the acquisition of the academic position "Associate professor" Dr. Diana Petkova participated with 3 publications and reports in refereed and indexed journals in the world database, 40 articles published in peer-reviewed journals and 5 chapters in monographs.

2. Citations

From the reference presented by the Medical Library, there are 52 citations in world literature.

3. Participation in scientific forums

Assoc. prof. Dr. D. Petkova presents a list of 66 participations in congresses and conferences for the competition for the academic position of professor (48 in Bulgaria and 18 in international forums) and 60 participations (19 international and 41 national forums) for the competition for the academic position of associate professor.

Assoc. prof. Dr. Petkova was the supervisor of 4 students for participation in BSYSB 2017, Varna 2017 and forums with international participation.

4. Participation in research projects

Assoc. prof. Dr. Petkova is the head of 5 national scientific or educational projects.

5. Profile of scientific work and original contributions

Assoc. prof. Dr. Petkova 's scientific interests are diverse: sleep-disordered breathing (SDB), non-invasive ventilation, respiratory failure and home oxygen therapy, pulmonary arterial hypertension, pulmonary embolism, pulmonary tuberculosis, and non-tuberculous mycobacteriosis, idiopathic pulmonary fibrosis, broncho-obstructive diseases - COPD and bronchial asthma, pneumonia, COVID-19, history of medicine and rare diseases.

Contributions of an original nature for Bulgaria are the published scientific data for our country on the epidemiology, the degree of severity, the quality of life of patients with SDB , as well as her studies on the disturbance of sexuality in the SDB. An algorithm for the diagnosis of SDB has been proposed, with the definition of the competence levels of various structural units of the health system in Bulgaria, and an algorithm has been introduced for the training and control of treatment with non-invasive ventilation in patients with SDB.

As a member of an international team, Assoc. prof. Dr. Petkova provides methodological guidelines and various tools for researching the quality of life in patients with idiopathic and postthromboembolic pulmonary hypertension.

In the monographic work "Home oxygen therapy: *conditio sine qua non*", Assoc. prof. Dr. Petkova 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, modalities, indications, contraindications and application models.

The national studies conducted in the field of broncho-obstructive diseases are one of the first national projects to collect data from outpatient and hospital care regarding the clinical characteristics, severity of the disease, treatment and management of exacerbations in this group of patients, summarize the current scientific knowledge and provide methodological guidance for behavior and approach to diagnosis and treatment.

III. Teaching and learning activity

Assoc. prof. Dr. D. Petkova presents the following report on teaching activities and academic workload: 2018/2019 – 198 academic hours, 2019/2020-199 academic hours, 2020/2021 -213 academic hours and for 2021/2022 -223 academic hours.

The average annual workload of Associate Professor Petkova for the last two years is 216.5 teaching hours/year with a norm of 99 hours.

Assoc. prof. Dr. D. Petkova is the head of the specialization in pneumology and phthisiology of 5 specialists and she is the scientific supervisor of 7 doctoral students, one of whom he successfully defended.

She is a member of the state examination commission for the specialty pneumology and phthisiology.

IV. Professional qualification and diagnostic and therapeutic activity

Associate professor Dr. D. Petkova has a total work experience of 28 years 2 months and 26 days and continues to work at the present time.

She has two specialties: "Internal Diseases" and "Pneumology and Phthisiatry".

Associate professor Dr. D. Petkova has the legal capacity to perform the highly specialized activity "Polysomnography in sleep and wakefulness disorders" and is the chairman of the commission for acquiring the legal capacity to perform the highly specialized activity "Polysomnography in sleep and wakefulness disorders", MU Varna.

Associate professor Dr. D. Petkova is the initiator of the first interdisciplinary sleep medicine center in our country, based in the University Clinic for Pulmonary Diseases, which he has been leading since 2004 - head of the sleep medicine department and head of the first department for sleep medicine and NIV at UMHAT "St. Marina" Varna.

She is the initiator of the "Pulmonary Arterial Hypertension" project together with the Center for Pulmonary Hypertension of the University of Zurich, Switzerland, opening of an interdisciplinary center in UMHAT "St. Marina" Varna.

She is the chair of the commission for prescribing medications for patients with pulmonary arterial hypertension, IPF and severe asthma at the UMHAT "St. Marina" in Varna.

Assoc. Dr. D. Petkova is the chairman of the Committee on Quality Management and Risk Management in UMHAT "St. Marina" Varna from 2000-2016.

V. Membership in creative and professional organizations

Assoc. Dr. Diana Petkova is a member of the Bulgarian Society of Pulmonary Diseases, and since 2010 member of the Board of the Bulgarian Society of Pulmonary Diseases. For the period 2014-2018, she was the chairman of the Board of the Bulgarian Society of Pulmonary Diseases and a national delegate in ERS. From 2018-2022, she is the vice-chairman of the Board of of BSPD, and

from 2022 to the present she is the chairman of the Board of the Bulgarian Society of Pulmonary Diseases.

Associate professor Dr. D. Petkova is a member of the National Expert Board on Pulmonary Diseases at the Ministry of Health and a member of the Expert Council on Pulmonary Diseases and Tuberculosis at the Ministry of Health, a member of the National Coordinating Council (NCC) for the improvement of seasonal influenza vaccination and an expert of the NHS.

Member of the Bulgarian Medical Union, member of the National Control Commission, of the National Ethics Commission, member of the Board of the BLS Varna, chairman of the Committee on Professional Ethics of the BLS-Varna, member of the Union of Scientists in Bulgaria - Varna branch, member of ERS, member of the Swiss Society for Quality Management in Healthcare.

Associate professor Dr. D. Petkova 's merits as chairman of the Board of Directors of BSPD 2014-2018 and from 2022 are exceptional. in the organization and conduct of national scientific events with international participation, at which he is the chairman of the Scientific Committees of the 5th and 8th Congresses of the BDBB and the chairman of the Organizing Committees of the 6th and 7th Congresses of the BDBB. During the mandates, the BSPD Board launched the initiative and the BSPD Summer Schools were organized with the participation of lecturers from Europe and the USA, the tradition of holding the autumn "Courses for Young Pulmonologists", courses for "Respiratory Nurses", "Spirometry" and "Bronchology" courses was continued. Participates

For the period 2002-2016 she is the coordinator of an international project between UMHAT St. Marina Varna and Inselspital, Bern, head of the Quality Management sub-project, within which the "Business Excellence" model has been implemented in UMHAT St. Marina and Medical university Varna and projects have been implemented. The two institutions are the first in Bulgaria to receive, after a thorough external audit, a quality certificate from the EFQM foundation based in Brussels.

Associate Professor Dr. Diana Petkova is the editor-in-chief of the magazine "Heart Lung" until 2022, a member of the editorial board of the magazine ASKLEPIOS international annual of history and philosophy of medicine, the magazine GP Medic and Medic Plus.

Prof. Dr. Diana Petkova is an honorary member of the lung league St.Gallen, Switzerland, winner of the certificate for contribution to the public benefit of ABBA and an honorary badge and diploma for the development of pneumology and phthisiology in Bulgaria.

VI. Compliance with minimum national requirements

From the presented table, in accordance with the Regulations for the implementation of the Law on the development of the academic staff in Bulgaria, the implementation of the minimum national requirements by groups of indicators is as follows:

- Group A - completed - 50 points;
- Group V - completed: habilitation thesis – monograph -100 points;
- Group G - completed: mandatory minimum of 200 points;
- Group D – fulfilled: minimum requirements 100 points;
- . Group E – fulfilled: minimum requirements 100 points

Conclusion: From the materials presented to the candidate, I found that she meets the minimum requirements set by the Law on the Development of the Academic Staff and the Rules for the Development of the Academic Staff of the University of Medicine - Varna.

After the careful review of the materials provided by the candidate, I give a **POSITIVE ASSESSMENT** and recommend that **Assoc. Dr. Diana Petkova Valkova-Gospodinova**, MD be presented by the Scientific jury of Faculty Board for selection for the academic position of "**Professor**" Academic Sector "Pulmonary Diseases and Allergology", First Department of Internal Medicine, Faculty of "Medicine" and Clinic of Pulmonary Diseases at UMBAL "St. Marina".

25.07.2023, Sofia

Prof. Dr. Vania Youroukova, MD

