

STATEMENT

from **PROF. IVAN NIKOLAEV STAYKOV, M.D.**

*Head of Neurology department and Sleep Medicine,
Acibadem City Clinic Tokuda Hospital, Sofia*

I have been chosen as an external member of the scientific jury in order to present a statement by the order № RD-26 - 1166/05.05.2021 of the Executive Director of UMPHAT “N. I. Pirogov”.

Regarding a Competition for academic position “Associate Professor” in higher education section 7-“Healthcare and sport”, in professional field 7.1. Medicine and scientific specialty

“Neurology”(03.01.19). In accordance with Art. 60, paragraph 2, of the Regulations for the development of the academic staff at UMPHAT “N. I. Pirogov”- Sofia, according to the decision of the Academic Jury with protocol No HC-02-21/28.04.2021.

Only one candidate is participating in this competition – Maria Ivanova Dimitrova, M.D., who has presented all the necessary documents that meet the criteria for acquiring academic positions and scientific degrees from Regulations for the development of the academic staff in UMPHAT “N.I. Pirogov” – Sofia.

1. Biography, education and qualifications:

Maria Dimitrova M.D. was born in 1983 in Rousse. She is a graduate of Mathematics School “Baba Tonka” in Rousse, and in 2007 she receives a master’s degree in Human Medicine at Medical University of Sofia. From 2008 to 2013 she passes her residency in Neurology at Military Medical Academy – Sofia, at the Department of Neurology and Neurosurgery. She acquires a specialty in “Neurology” in 2013. She obtains a certificate in Neurosonology from 2014 at Medical Academy, Sofia. In 2016 she joins the Bulgarian Military Forces, and in 2017 she is assigned as an assistant in Neurology Department in Military Academy, Sofia. For the last year Maria Dimitrova is head of the Neurology department in UMPHAT “N.I. Pirogov”, as she acquires master’s degree of “Public health and health management” in Medical University, Sofia.

Maria Dimitrova, M.D. has conducted many educational courses on neuropsychology and neurosonology.

She is a member of Bulgarian Society of Neurology, Bulgarian Society of Neurosonology and cerebral hemodynamics, Bulgarian Society of Somnology, European Society of Neurosonology and cerebral hemodynamics, Bulgarian Medical Association.

2. Scientific and research activity, scientific contributions:

Maria Dimitrova M.D. presents 79 scientific papers, with one dissertation paper included, one monograph – habilitation paper, 35 scientific publications – 6 of them in journal with impact factor, 21 participations as reports and posters in scientific congresses and conferences – 16 of them are with published abstracts, 21 participations in international forums – 18 of which are with published abstracts, 12 in journals with impact factor. Maria Dimitrova M.D. is a leading author in more than 40% (34) of the scientific papers, and more than 60% (48) of them are published after she had acquired her educational and scientific degree “Doctor”.

The highly specific and exact distribution of the scientific work makes impression, which helps significantly with their evaluation.

The topic of obstructive sleep apnea (OSA) and its contribution in neuropsychological and cognitive area is most widely discussed in the scientific papers of the candidate. On this scientific topic is dedicated her dissertation.

Obstructive sleep apnea, neuropsychological and cognitive contributions (I, III 5, 6, 10, 14, 21; IV 4.1.4, 4.2.4, 4.2.5, 4.2.7, 4.2.9, 4.2.10, 4.2.11):

In her dissertation – neuropsychological impairments in OSA, Dr. Dimitrova confirms the presence of neuropsychological impairments in OSA patients, makes comprehensive assessment of the executive functions of this patient group and confirms the presence of executive function impairments in them. The candidate uses wide range of diagnostic tests for evaluation of the executive function of patients with OSA and proposes a short neuropsychological battery to be included in the routine evaluation of these patients. Through combining the literature data and personal experience in many original scientific work and participations, Maria Dimitrova M.D. proves that in regard of the psychomotor speed and executive functions the highest presented deficit is found in patients with OSA, predominantly in switching from fast change in the activities and different stimuli, developing a strategy and coping with complex activities. These results and conclusions have a great scientific, theoretical and practical application, as some of them are with original contribution to the Bulgarian science.

Another widely covered object in the scientific activity of Maria Dimitrova MD is related to cerebro-vascular diseases, as she has devoted her monograph – a habilitation work to them, as well as series of scientific publications and reports.

Cerebro-vascular diseases (II, III 7, 20, 22, 25, 28, 34; IV 4.1.6, 4.1.7, 4.1.8, 4.1.9, 4.1.10, 4.1.11, 4.1.12, 4.1.14, 4.1.20, 4.1.21; IV4.2.3, 4.2.6, 4.2.12, 4.2.14):

The monograph “Diagnostic and therapeutic approaches in cryptogenic brain stroke” is devoted to the definition, epidemiology, genesis and differential diagnosis and therapeutic approach in strokes with unknown etiology. She examines in details the rare causes for ischemic brain strokes that might remain unrecognized for long time. The candidate shares her own material – patients with rare causes of ischemic strokes and concludes a wide range of etiologic and pathogenic factors for their presentation. This work has a theoretical and scientific contribution to the Bulgarian neurology. In series of scientific publications and reports Maria Dimitrova MD profoundly explores modern concepts for primary and secondary prophylaxis of brain strokes, as she proposes a complex of non-pharmacological therapy for cerebro-vascular diseases. In another publications the candidate presents the role of secondary prophylaxis of strokes with the new oral anticoagulants, modern diagnostic and therapy of brain venous thrombosis, immunological aspects of ischemic strokes. These scientific papers have mainly practically significance.

Some of the publications are aimed at the neuropsychological impairment and therapeutic approaches in patients with multiple sclerosis.

Multiple sclerosis (III 9, 18, 23, 24, 31, 35; IV 4.2.1):

Maria Dimitrova MD explores in details different aspects of the psychological profile and cognitive impairments in patients with multiple sclerosis, modern pathogenic-based therapeutic strategies, indications for treatment with dimethyl fumarate and ocrelizumab and their side effects, treatment of exacerbated optic myelitis, as these scientific works have scientific and applicable significance.

COVID-19 (III 30, III33, III26, IV 4.2.19, 4.2.20):

In some of the scientific articles and reports, presented at conferences, Maria Dimitrova MD shares her own observations and makes conclusions about neurological complications in patients with COVID- 19. This is an exclusively topical subject, and the descriptions are with serious applicable significance.

Not only do the presented by Maria Dimitrova MD scientific papers for participation in the competition comply with the minimal mandatory scientific metric criteria for acquiring the

academic position , but also significantly exceed the minimal mandatory scientific metric criteria for acquiring the academic position “Associate professor”, defined by the Regulations for the development of the academic staff at UMPHAT “N. I. Pirogov”- Sofia.

3. Citations of the authors’ publications in national and international literature. According to the official reference the scientific papers written by Maria Dimitrova are cited 18 times in Bulgarian science journals.

4. Scientific and academic activity:

Maria Dimitrova MD as a Head of Neurology department of UMPHAT “N. I. Pirogov”- Sofia is a supervisor of 7 neurology residents, lector and organizes practical exercises for emergency medicine in neurology for 4-year medical students.

5. Conclusion:

Undoubtedly, Maria Dimitrova MD is a established neurologist, scientist and teacher in the field of neurology, as she skillfully combines scientific, research and academic activity in the process of her professional work.

Based on the importance of the presented by Maria Dimitrova MD scientific papers for the competition, her scientific, research, theoretical and science-applicable contributions, combined with the diverse clinic and academic activity I declare that the candidate fully meets the mandatory and specific conditions and science metric criteria to be awarded with academic degree and to acquire the academic position “Associate professor” in UMPHAT “N. I. Pirogov”- Sofia.

According to all of the above I confidently give a positive statement and recommend to the esteemed members of Academic Jury that they support the candidature of Maria Dimitrova MD for acquiring the academic position “Associate professor” in higher education section 7- “Healthcare and sport”, in professional field 7.1. Medicine and scientific specialty “Neurology”(03.01.19). In accordance with Art. 60, paragraph 2, of the Regulations for the development of the academic staff at UMPHAT “N. I. Pirogov”- Sofia.

09.06.2021, Sofia, Bulgaria

Prof. Iv. Staykov, MD