#### REVIEW

#### from

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Concerning: Competition for the academic position "Associate Professor" announced in SG issue 12/08.02.2019 in the scientific specialty "Physical and rehabilitation medicine", professional field 7.1 Medicine, higher education area 7. Health and sport for the needs of the Educational Sector "Thalassotherapy, physiotherapy and rehabilitation", Faculty of Public health and the Clinic of Physical and Rehabilitation Medicine at "Saint Marina" University Hospital – Varna

### 1. Information for the procedure:

According to Order No P-109-141/08.04.2019 of the Rector of MU-Varna and Protocol No 136/26.03.2019 from a meeting of the Faculty Council of Medicine I have been appointed as a member of the scientific jury and to prepare a review concerning the competition for the academic position "Associate Professor" to MU-Varna and UMBAL "Saint Marina" — Varna on the scientific specialty "Physical and rehabilitation medicine".

The competition was announced in SG issue 12/08.02.2019. It is in accordance with the Law for development of academic staff in Republic of Bulgaria and its rules of application in Medical University of Varna. On the basis of the abovementioned legal documents, all the procedural requirements for the announcement of the competition, the deadline for submission of documents and the choice of a scientific jury are met.

The only candidate is Dr. Mariana Mihaylova Krasteva-Russeva, Ph.D. in medicine.

# 2. Biographical data of the applicant:

Dr. Mariana Mihaylova Krasteva-Russeva is born on 4.07.1969 in Kavarna, where she finished her secondary education. In 1995 she graduated as "master" in Medicine in Medical University of Varna and in 2004 she acquired specialty in "Physical and rehabilitation medicine".

Her professional realization began as an intern at the Department of Children's diseases in the Municipal Hospital of Kavarna (1996).

Since 2000, Dr. Mariana Mihaylova Krasteva – Russeva has been a resident in the Clinic of physical and rehabilitation medicine in MU-Varna and since 2004 - assistant in the same department and passing through all academic levels to chief assistant (2011).

In 2016 she successfully defended her thesis entitled "The Role of Extensive Therapy in the Complex Treatment of lumbar disc disease" and acquired an educational- qualification degree PhD in "Physiotherapy, balneology and rehabilitation".

Dr. Mariana Mihaylova participates in great number of qualification courses for postgraduate studies for the period 2005-2018: rehabilitation of patients with myocardial infarction and cardiac surgery; innovations in manual diagnostics and therapy; excitomotor

electrodiagnostics of the AFMP; manual medicine; extensive therapy; acupuncture; laser therapy; prolotherapy; neural therapy; as well as for pedagogical qualification of trainers from medical institutions and quality of life in children with physical difficulties with focus on motor development and gymnastics for children with special seeds (Children's Cerebral Paralysis).

Dr. Mihaylova is fluent in Russian and English languages and has excellent computer and good communication skills and teamwork abilities.

She is a member of the Association of Physical and Rehabilitation medicine, the Bulgarian Society of Manual Medicine, BMA and CITUB.

### 3. Scientific activity and scientific contributions:

The assessment of the candidate for the academic position "Associate Professor" – Dr. Mariana Mihaylova is a complex and includes research, teaching and practical activity according to the Regulations for development of academic staff in MU-Varna. It can be presented and analysed as follows:

## I. Scientific activity related to her research activities:

The scientific activity of Mariana Mihaylova Krasteva-Russeva was evaluated on the basis of real publications. In a scientometric aspect, it can be summarised in the following way:

### 1) Total number of scientific works

The total publication activity of the applicant contains 40 scientific work.

29 of these participate as evidence material in the report for implementation of the minimum requirements for the occupation of academic position "Associate Professor".

There are also 11 publications, outside the evidential material, to meet the minimum requirements for the occupation of academic position "Associate Professor".

### 2) Authorship:

From the presented real publications in magazines, incl. monography, Dr. Mariana Mihaylova is a single author in 5 scientific works, first author in 12 articles (totally 42.5%); second author in 11 articles, i.e. 1/3 (30%), third author in 9 articles and subsequent author in 2 articles (totally in 23%).

### 3) Total number of quotations

The academic reference for the citations from MU-Varna indicates that Dr. Mariyana Mihaylova has 11 citations, 10 of which are in Bulgarian scientific journals and 1 in monography.

### 4) Impact factor

• No impact factor data (IF)

## **Evaluation of scientific activity**

The scientific interests and the realized studies of Dr. Mariana Mihaylova, published in articles, dissertation and monography have made a significant contribution to the development of physiotherapy and rehabilitation in Bulgaria. The importance of her scientific work can be summerised in 2 aspects: with original and scientific-applied character.

Her monographic work "Osteoporosis - physical therapy and prophylaxis" has a great practical significance, as it examines the newest possibilities of physical therapy regarding the prevention and treatment of this important socially significant disease.

Physical therapy and prevention in the lumbar disc disease take an essential place in the publications of Dr. Mariana Mihaylova. She made for the first time in Bulgaria a thorough study of the effectiveness of the complex application of preformed physical factors and intermittent extensive therapy with Eltrac 471 on the functional recovery of patients and applied questionnaires for evaluation of disability (Roland-Morris) and the psycho-functional state of the individual ("SAM" = (self-esteem, activity, mood).

In scientific works of Dr. Mariana Mihaylova, an important place in the management of low back pain take the physical therapy and Bioptron's application in influencing the pain syndrome. She has numerous scientific overviews and articles in manual medicine and diagnostic tests for diseases of the muscle-skeletal apparatus and peripheral nervous system.

With very great practical importance are the works of Dr. Mariana Mihailova for problems of patients in childhood. They are in two directions: physiotherapy and prevention of common diseases in children and rehabilitation and research on children with special educational needs and autism. For the first time in Bulgaria she made a study on the capabilities of direct transcranial current stimulation (tDCS) on a number of impaired functions, such as physical development, cognitive skills, speech skills in children with autistic spectrum disorder.

Another aspect of the scientific publications of Dr. Mariana Mihaylova are the possibilities of physical therapy for influencing tonsillar hypertrophy and the associated symptoms of disturbed night breathing in often sick children from infections of the upper respiratory tract. For the first time in Bulgaria, together with colleagues, she participates in a study on the effectiveness of PPL (polarized-polihromatic, non-coherent light) and ultrasound in small patients with tonsillar hypertrophy, and the data obtained indicate the high effectiveness of the method.

# II. Summarised, the scientific activity of Dr. Mariana Mihaylova Krasteva-Ruseva can be presented in several scientific fields:

The scientific works presented and the results of the research work are thematically divided into 7 scientific fields:

- 1) Extensive therapy, pre-formed physical factors and prevention of a lumbar disk disease
- 2) Management and prevention of low back pain
- 3) Manual medicine and diagnostic tests for diseases of MSS and peripheral nervous system
- 4) Application of physical factors in MSS diseases
- 5) Physical therapy and prophylaxis in osteoporosis
- 6) Physical therapy and prophylaxis in childhood
- Physiotherapy and prevention of common diseases in childhood
- Rehabilitation and testing in children with special educative needs and autism
- 7) Others

### III Quantitative indicators by criteria (table 1)

INDICATORS		Solo author	1-st author	2-nd author	3-rd author	Next author
Scientific papers-evidence of performance of n "Associate Professor"	nining. require	ments for t	he occup	oation of	academic	position
Monography		1				
Full-text publications in scientific journals, refered and indexed in world-famous databases with scientific information	BG scientific ed.		1			1
Full-text publications in nonreferenced publications scientifically reviewed	BG scientific ed.		6	4	5	
	Foreign scientific ed.	4	2	4		
Scientific publications except the evidence of m	in.requiremen	ts for acad	emic posi	tion "Ass	sociate Pr	ofessor''
Publications related to PhD thesis	BG scientific ed.		3		1	
Full-text publications in scientific journals	BG scientific ed.			3	1	1
Published summaries in scientific journals	BG scientific ed.				2	

Dr. Mariana Mihaylova participates in 28 national and international scientific forums, 11 of which with reports.

## 4. Training-Teaching Activity:

Dr. Mariyana Mihaylova has been an assistant and lecturer for 15 years and has a very large course workload, which is significantly above the required minimum of 220 academic hours.

She teaches (lectures and exercises) in the discipline "Physiotherapy" of Bachelors in the specialties "Midwife", "Nurse", "Rehabilitator" and the discipline "Physiotherapy and rehabilitation" of Masters of "Medicine" and participates actively in the development of Curricula and tests of students.

Dr. Mariana Mihaylova is a course manager in the Master program "Rehabilitation, thalassotherapy, wellness and SPA".

She participated actively in the project "Students' practices – Phase 1" of the Ministry of education, implemented with the financial support of EU. As a mentor for UMBAL "St. Marina" EAD – Varna she has trained 20 students and was an academic mentor of 15 students (2017/2018) in the specialties "Medicine" and "Rehabilitator".

### 5. Practical activity:

Dr. Mariana Mihaylova is a doctor with almost 20 years of work experience and has been working for 15 years as a specialist in physical and rehabilitation medicine. She has high professional competence, a significant number of additional qualifications and skills.

In her daily practice she conducts treatment of patients with diseases of the locomotory system, central and peripheral nervous systems and works closely with colleagues from various medical specialties such as orthopedists, neurologists, rheumatologists, family doctors and others.

6. In ongoing procedure for the occupation of the academic position "Associate Professor" there are not identified any infringements.

#### 7. Conclusion:

On the basis of the criteria set out in the Regulations of the Medical University of Varna, I propose to the honourable members of the scientific jury to vote positively and offer to the Rector of Medical University – Varna Dr. Mariana Mihaylova Krasteva-Russeva, PhD, to occupy the academic position "Associate Professor" in the scientific specialty "Physical and rehabilitation medicine" for the needs of the Educational sector "Thalassotherapy, physiotherapy and rehabilitation" of the Faculty of Public Health and the Clinic of "Physical and rehabilitation medicine" at the University Hospital "St. Marina"- Varna.

28 April 2019 Varna The review has been prepared by: Prof. Valentina Madjova, MD, PhD