

#### OPINION

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External member of the scientific jury – Order No RD – 135/12 Apr 2024 of the Rector of the University "Prof. Dr. Asen Zlatarov" – Burgas

On: Competition for the academic position of "Associate Professor" in "Physiotherapy, Balneology and Rehabilitation", field of higher education 7. Health and Sports, professional field 7.1. Full-staff Medicine at the Department of Kinesitherapy and Rehabilitation, Physical Medicine and Sports, announced in State Newspaper No. 13/13.02.2024.

On the basis of an order of the Rector of the University "Prof. Dr. Asen Zlatarov" – Burgas No RD – 135/12 Apr 2024 by decision of the Academic Council for holding a competition for the academic position of "Associate Professor" in "Physiotherapy, Balneology and Rehabilitation", field of higher education 7. Health and Sports, professional field 7.1. Medicine is a full-time competition for the needs of the Department of "Internal Medicine, Social Medicine, Physiotherapy and Rehabilitation, Disaster Medicine" at the Faculty of Medicine of the University "Prof. Dr. Asen Zlatarov" – Burgas, announced in State Newspaper No.13/13.02.2024 year

One candidate took part in the competition - Dr. Iliya Todorov Todorov, MD.

The opinion has been prepared in accordance with the Academic Staff Development Act, the Regulations for the Implementation of the Law on the Development of Academic Staff and the Regulations on the Terms and Conditions for Acquiring Scientific Degrees and Occupying Academic Positions at the University "Prof. Dr. Asen Zlatarov" - Burgas.

#### Brief biographical data of the candidate:

Dr. Iliya Todorov Todorov, Ph.D. was born in Varna in 1976, where he graduated from the First Language High School, English class. He graduated with a Master's degree in the regulated profession of Medicine in 2001 at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna. In the period 2001 - 2006 he specialized in Physical and Rehabilitation Medicine at the Medical University - Varna and in 2006 he acquired a specialty. In 2011 he acquired the degree of Doctor in the scientific specialty "Physiotherapy, Balneology and Rehabilitation".

He began his professional career as a full-time PhD student at the Clinic of Physiotherapy, Rehabilitation and Thalassotherapy at the University Hospital "St. Marina" - Varna. For the period 2007 – 2015 he held the positions of Resident Doctor, Resident, Specialist, Chief

Assistant, Associate Professor, Head of the Clinic of Physiotherapy, Rehabilitation and Thalassotherapy at the University Hospital "St. Marina" - Varna. In the period 2015 to 2019, Dr. Todorov was Head of the Scientific Sector "Thalassotherapy, Physiotherapy and Rehabilitation" at the Medical University - Varna. On December 2, 2019, Dr. Todorov left Medical University - Varna and "St. Marina Hospital" - Varna. For the next 2 years, Dr. Todorov worked as a specialist doctor in private practice in the city of Varna. Since January 2022, Dr. Todorov has been appointed Head of the Physical and Rehabilitation Medicine Clinic at the "Heart and Brain" Hospital. Since July 2023, Dr. Todorov has been practicing at Elite Clinic Varna, of which he is the founder and owner. In the period 2013 - 2018, Dr. Todorov participated as a guest lecturer in Manual Medicine Courses in Istanbul and Ankara, Turkey.

Dr. Todorov has participated in a number of international congresses and assemblies in London, Prague, Berlin, Elche, Utrecht, Paris, Rome and Istanbul, as well as in the meetings of the Bulgarian Society for Youth and Youth in Bulgaria – Sofia, Ruse, Velingrad, Narechen, Pavel Banya, Pomorie, Dryanovo and others.

Dr. Todorov is an established international lecturer with training courses and seminars in Australia, South Korea, Thailand, Great Britain, Turkey, the Czech Republic, Slovakia and others.

He has an excellent level of English, and at an intermediate level - German and Russian.

# The most important contributions from the research and applied research activities of the candidate include:

For the current competition, Dr. Todorov presents 41 scientific papers, all full-text publications. He also has an abstract and a monograph related to the dissertation, the latter of which are not included in the submitted reference for participation in this competition.

Dr. Todorov is the first author in 12 publications (29%), second – in 16 publications (39%). He is the sole author of 2 of the publications.

In total, the current scientific output of Dr. Todorov is 47 articles with a total volume of 321 pages.

Since 2010, the candidate has been an expert in the clinical trial of Bayer SPINART, he was elected as a member of the Steering Committee. The results of the study are currently a company secret.

Table 1. Minimum required points for the academic position of Associate Professor in field 7. "Health and Sports", professional field 7.1. "Medicine" in accordance with the regulations for the implementation of the Law on the Development of the Academic Staff of the Republic of Bulgaria. Minimum required points for the academic position of Associate Professor in field 7. "Health and Sports", professional field 7.1. "Medicine" in accordance with the Regulations for the Development of the Academic Staff at the University of Burgas.

Indicator group	Associate	Associate Professor,	Dr. Ilia
	Professor, in accordance with Law on the Development of the Academic Staff of the Republic of Bulgaria	according to the Regulations for the Development of the Academic Staff at the University of Burgas	Todorov, MD
A	50	50	50
В	100	100	100
C	200	200	429.5
D	50	50	110
Total	400	400	579.5

The list of famous citations includes 12 citations, of which: 3 citations in scientific journals, refereed and indexed in world-famous databases (Scopus and Web of Science); 2 citations in a monograph or book chapter and 7 citations in non-refereed journals with scientific review.

#### Characteristics and contributions of scientific publications

Dr. Todorov's scientific publications cover the fields of Manual Medicine, Electrotherapy, Disc Disease, Balneotherapy, Post-Stroke Rehabilitation, Plexus Brachialis Pathology, Parkinson's Disease, High-Energy Lasers, etc.

The main scientific activity of Dr. Todorov is in the field of Manual Medicine, which is related to most of his postgraduate courses and specializations. He has worked diligently in the field of manual diagnosis and therapy of functional disorders of the sacroiliac joints, all parts of the spine and some muscles with frequent preexposure – m. piriformis, m. iliopsoas.

Functional pathology of the sacroiliac joints (SIS) is one of the poorly studied areas in Bulgarian science. It is here that Dr. Todorov has concentrated to the greatest extent, with 7 of the publications concerning these joints, and 2 of them are entirely personal. A contribution on a national scale is the non-contact skin thermometry introduced as a verification method for influencing the function of SIS. Relying on known neurophysiological phenomena, Dr. Todorov has practically discovered an effective methodology for proving the effect of manual manipulations, i.e. functional normalization of local blood circulation. Using modern statistical methods to systematize the results obtained, the mentioned methodology is fully disclosed from a scientific point of view and can be recommended for application as a verification method in other scientific developments.

A good impression is made by the scientific collaboration with a foreign specialist in the face of Dr. Christian Mucha – lecturer at the German Higher Sports School – Cologne, Germany. With this colleague Dr. Todorov has 4 joint publications, which is an example of a long-term cooperation and good teamwork. Each of the four publications concerns a different topical

pathology, the results obtained and their conclusions being scientific contributions Contributions of an original nature

For the first time in Bulgaria are published:

- scientific research proving as an effective verification method the non-contact infrared skin thermometry for patents with functional pathology of SIJ;
- · data proving the good effect on Parkinson's disease from decimeter wave therapy;
- for the first time in Bulgaria, a division of manual diagnostic tests for SIJ into specific and non-specific has been carried out, and the final correlation of such a division with the established results has been proven;
- data on plantar pressure distribution in patients with lumbar root compression syndromes;
- data on the effectiveness and clinical reliability of the Rosina test used in 2 scientific researches;
- data from a scientific study establishing FES as an integral part of rehabilitation after reconstructive operations in connection with anteromedial knee instability

For the first time in Bulgaria have been studied:

- the influence of local cryotherapy on the lower leg muscle and skin blood circulation;
- the application of manual therapy and PIR in cases with piriformis muscle syndrome;
- the application of manual therapy and PIR in cases with illiopsoas muscle syndrome;
- the effect of the application of geothermal water from spring R-119X in Varna in patients with frequent degenerative joint diseases
- he effectiveness of the combined application of high-energy laser and manual therapy in functional disorders of the thoracic region.

#### Scientifically applied contributions:

- development and validation of a diagnostic approach to identify dysfunctions of the sacroiliac joint
- introduction of the modified Rankine scale as a method for assessing functional recovery in post-stroke hemipareses.
- development and validation of specific protocols for working with a high-energy laser in cases of peritendinitis of the glenohumeral joint and functional disorders in the thoracic vertebral segment.

#### Relevance of contributions to science and practice

The above facts are proof of the scientific contributions of Dr. Todorov's scientific work. Especially noteworthy are the developments in the field of Manual Medicine, as well as his teamwork with foreign and Bulgarian specialists in the fields of electrotherapy, disc disease, postoperative rehabilitation, Parkinson's disease, high-energy lasers, etc. These contributions meet the requirements for occupying the academic position of Associate Professor.

### Requirements related to the diagnostic and therapeutic activity:

Dr. Todorov is the head of the Physical Medicine and Rehabilitation Clinic at the Heart and Brain Hospital, participates in teams with colleagues from other universities and hospitals, as well as with specialists from other disciplines such as neurologists, vascular surgeons, orthopedists, etc. In his capacity as a doctor – head of the clinic, he conducts the visits and consults and adjusts the treatment plans of the patients in the hospital.

#### Requirements related to teaching activities:

Dr. Todorov has conducted lectures and practical training in Physical and Rehabilitation Medicine for IVth grade medical students, nurses, midwives and rehabilitators at the Medical University – Varna. He has conducted training in English for foreign students studying at the Medical University – Varna, has prepared curricula and tests in English. He has actively participated in examination committees of all kinds – semester exams, for specialization, for doctoral studies, corrections. Dr. Todorov is the main author of the Master's program "Rehabilitation, Thalassotherapy, Wellness and Spa", for which Medical University – Varna was awarded with an international distinction, and the mentioned program continues to be one of the most successful for the University of Varna at the present time.

#### Conclusion:

In conclusion, I give a positive assessment of the activities of Dr. Iliya Todorov Todorov, Ph.D. and I VOTE POSITIVELY, suggesting that the members of the scientific jury also vote positively for his election for the academic position of Associate Professor in the field of higher education 7. Health and Sports, professional field 7.1. Medicine, in the scientific specialty "Physiotherapy, Balneology and Rehabilitation" for the needs of the Department of Kinesitherapy and Rehabilitation, Physical Medicine and Sports at the Faculty of Medicine at the University "Prof. Dr. Asen Zlatarov", Burgas.

5 June 2024 Pleven Prepared the opinion: . Ass. Prof. Dr. Maya Krasianova, MD, PhD