

## REVIEW

By Assoc. prof. Tabet Ahmed Al-Sadek, DM

**Trakia University- Mecical College- Stara Zagora**

According to a competition for the occupation of an academic position "Associate professor" in the field of higher education 7. Health care and sports, professional direction 7.4 Public health, specialty "Kinesitherapy", announced in SG No. 99 /13.12.2022. for the needs of the Medical College at Trakia University- Stara Zagora on 0.5 position.

The review was prepared in accordance with the Law of the development of the academic staff, the regulations for the application of this law, the regulations for the development of the academic staff at Trakia University- St. Zagora, Order No. 294/06.02.2023 of the Rector of Trakia University for the appointment of Scientific jury and meeting of the latter - protocol No. 1. Based on Order No. 294/06.02.2023, I am appointed to present a review as the chairman of the scientific jury.

One candidate participated in the announced competition - Ch. Assistant Professor -Ana Todorova Nikolova, PhD, who submitted the necessary set of administrative documents, according to the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and Art. 78, par. 1 of the Regulations for the Development of the Academic Staff at Trakia University.

Ana Nikolova (born on 30.12.1977 in Sofia) completed her bachelor's degree in kinesitherapy in 2000 in the NSA "V. Levski", and in 2012 she obtained a master's degree in "Public Health and Health Management". The educational and scientific degree "doctor" in professional field 7.4 Public health acquired in 2019 after a successful defense of a dissertation on the topic: "Postoperative kinesitherapy after fractures in the elbow region". She has been working as a physiotherapist since 2001. Since 2014 is a part-time teacher at the National Academy of Sciences "V. Levski" and SWU "N. Rilski" and from 2021 is a ch.assistant professor at the Medical College of Trakia univrsity- Stara Zagora. The candidate has acquired competencies from participation in a number of courses - 16 in number to increase

her professional qualification, including Specialized training for Physiotherapy of elbow and shoulder joints, PNF in Practice Course, etc., as well as specializations abroad. The main areas in which she works are: kinesitherapy for musculoskeletal dysfunctions, kinesitherapy in sports practice, kinesitherapy in orthopedics and traumatology and kinesitherapy in pediatrics.

Ana has been working as a kinesitherapist for the past 23 years. During this period, she worked at SBALAG "Maichin Dom"-Sofia, UMBAL "Tsaritsa Joanna - ISUL"-Sofia, Private Praxis fur physicalische therapie "Maria Anne-Widmann", Ulm Germany, Department of Orthopedics, Traumatology and reconstructive surgery of the Sofia Medical Academy, Military Medical Academy-Kuwait and Physiopilates EOOD. In reality, this gives her the opportunity to apply practical kinesitherapy and to develop scientific activity in the entire field of this specialty. The candidate speaks English and German and is a member of the Association of Physiotherapists in Bulgaria, EUSSER (European Association of shoulder and elbow physiotherapists).

#### **1. SCIENTIFIC RESEARCH ACTIVITY:**

The scientific interests of Ch. assistant Ana Nikolova, are concerned with the problems of practical and scientific activity in the field of kinesitherapy, as well as applied activities in the field of sports.

For the competition, **1** monographic work, **11** publications published in scientific journals and anthologies, as well as **1** guide based on a protected dissertation work were submitted.

**The candidate meets the minimum national requirements regarding scientometric indicators and participates in the competition with:**

1. Dissertation work for the award of the educational and scientific degree "doctor" on the topic: "Postoperative kinesitherapy after fractures in the elbow region". 50 points.
2. Monographic work "Kinesitherapy in femoroacetabular conflicts". 100 points.
3. Guideline based on a defended dissertation: "Guideline for postoperative kinesitherapy for fractures of the elbow joint".

4. Publications in scientific journals are **11**, of which 1 is independent and 10 are co-authored, **5** of which are published in international journals, referenced and indexed in Scopus and Web of Science. 292 points.
5. A reference is presented for the **citations** from Central university library, which are a total of **11** in peer-reviewed journals.

**2. The scientific contributions of Ana Todorova Nikolova in the field of orthopedic and neurological kinesitherapeutic practice:**

The publications are mainly in journals with orthopedic and special scientific-research focus. The rest are devoted to kinesitherapy in hemophilia, the impact of online learning on physical and mental health, the role of proprioception, etc.

1. Functional recovery with elastic resistance is shown in preventing the rapid development of stiffness in the elbow joint after complex surgical interventions.
2. It has been established that complications after trauma in the elbow joint can be secondary as a result of an incorrect approach in the period of functional recovery.
3. Data have been reported for the first time on an increased risk of developing ectopic ossification in the elbow, both bony and soft tissue ossificates, due to the application of passive stretching in combination with aggressive passive movements in order to increase the range of motion in the joint, especially in the early postoperative and post-traumatic period.
4. A study was made specifying the causes of contractures in the elbow joint, including the joint capsule and Fat Pad Sign.
5. The need to achieve muscle control with the already existing volume of movement after injuries and surgical interventions in the area of the elbow complex has been established for the first time in Bulgaria.
6. The relationship between the development of femoroacetabular conflict and some types of professional sports has been established, especially when the sports career is started in early childhood.
7. A detailed analysis of the affected muscle groups and myofascial components of and around the hip joint in femoroacetabular impingement

and their significance for clinical manifestations has been made for the first time in Bulgaria.

8. A proprietary technique of kinesiotherapy for femoroacetabular conflict was shown for the first time in Bulgaria.
9. The need to achieve muscle control with the already existing range of motion after injuries and operative interventions in the area of the elbow complex has been established for the first time in Bulgaria.
10. Scientific works related to hemophilia offer a modern approach through combined programs of special physical exercises and some elements of sports, effective in reducing pain, increasing the range of motion and muscle strength, and reducing feelings of fear of movement and injury.

### **3. EDUCATIONAL AND TEACHING ACTIVITY**

Ana Nikolova, PhD, has been actively involved in teaching since 2014. During this period, she was a full-time or honorary lecturer at the National Sport's Academy of Sofia, South West University of Blagoevgrad and currently at the Trakia University. She was elected in 2021 as Chief Assistant in Kinesiotherapy at the Medical College, Trakia University. Ana Nikolova prepares lectures and exercises on kinesiotherapy, kinesiology and pathokinesiology for students from the 1st and 2nd year in Rehabilitation department. Her total study load according to the attached report for the last academic year is 175 credits. The candidate has developed tests and innovations in training, all of which are included in the above-cited book based on a dissertation, used as a guide in the preparation of students.

**Ana Nikolova fully meets the legal requirements under this section.**

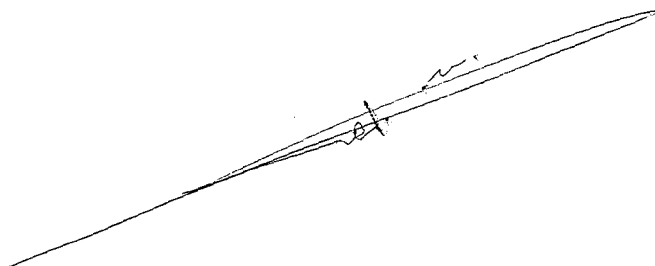
**The candidate, Anna Nikolova, is a serious and responsible scientist and researcher. She has an affinity for both medical practice and teaching and scientific activities. I am convinced that her professional and personal qualities will contribute to the development of the medical college at Trakia University.**

#### 4. IN CONCLUSION:

Upon analysis of all the documentation and the quantity and quality of the materials submitted for review, I have a reason to assume that they meet the requirements of the law on the development of academic staff in the Republic of Bulgaria and the regulations for its implementation, the minimum national requirements and the additional requirements of the regulations for the development of the academic staff at the University of Trakia - Stara Zagora. Based on the above, I am convinced that I vote **positively** regarding the candidacy of ch. assistant professor Ana Todorova Nikolova for the academic position "Associate professor" in Kinesitherapy in the field of higher education 7. Health care and sports, professional direction 7.4 Public health, specialty "Kinesitherapy" according to the announced competition for the needs of the specialty "Rehabilitation" in the Medical College of Trakia University - Stara Zagora at 0.5 position.

05.03.2023

Assoc.prof. Tabet Ahmed Al-Sadek, DM

A handwritten signature in black ink, appearing to be 'T. Al-Sadek', written over a long, thin horizontal line that spans across the page.