

## OPINION

from Assoc. Prof. Diana Krasteva Ivanova, Ph.D.  
Sofia University "St. Kliment Ohridski ", Faculty Medicine  
appointed as an internal member of the scientific jury by Order  
№ RD 38-510 / 22.10.2020  
of the Rector of Sofia University "St. Kliment Ohridski "

**Subject:** COMPETITION FOR ORDERING AN ACADEMIC POSITION  
"ASSOCIATE PROFESSOR" IN THE PROFESSIONAL FIELD 7.4 PUBLIC  
HEALTH (KINESITHERAPY), ANNOUNCED IN SG, NO. 67 / 28.07. 2020  
FOR THE NEEDS OF THE MEDICAL FACULTY OF SOFIA UNIVERSITY,  
ST. KLIMENT OHRIDSKI ", SOFIA

For participation in the competition are submitted the documents of one candidate Natalia Petrova Petrova, Assistant Professor in the Department of Neurology, Psychiatry, Physiotherapy and Rehabilitation, Preventive Medicine and Public Health, Medical Faculty of Sofia University " St. Kliment Ohridski "

### **Biographical data**

Natalia Petrova Petrova is born on August 21, 1974. In 1999 she acquired a bachelor's degree in SWU "Neofit Rilski" in Blatoevgrad, majoring in Kinesitherapy. In 2010 he acquired the educational qualification degree "Master" in "Educational Management" at SWU "Neofit Rilski" Blagoevgrad. Natalia Petrova defended her doctoral degree in Theory and Methodology of Physical Education and Sports Training (incl. Methodology of Physical Therapy), in 2015 at SWU "Neofit Rilski" Blatoevgrad, Faculty of Public Health with the topic of the dissertation "Role of kinesitherapy to improve the quality of life in patients with rheumatoid arthritis'.

Natalia Petrova's professional career began in 2016 in IPISMP in physical and rehabilitation medicine "Faith, Hope and Love", Dr. Evelina Nikolova - Blagoevgrad, as a basic kinesitherapist.

During the same period he worked at SWU "Neofit Rilski" in Blatoevgrad in the sector "Education, research activities". Since 2017, he has been an assistant professor at Sofia University "St. Kliment Ohridski".

### **Research activity**

Natalia Petrova presents for participation in the competition a total of 23 publications, of which: a monograph on "Rheumatoid arthritis complex diagnostic and therapeutic approach" and one participation in the guide. From the presented list of scientific publications for participation in the competition, one of the publications (№ 16 in the list) is included in the dissertation and is therefore not reviewed. Of these, publications in periodicals - 16, in collections - indexed 6. Assistant Professor Natalia Petrova is the first author of 4 publications. Papers in conferences with published abstracts - 15 of which international scientific forums -1.

Natalia Petrova, has participated in the following research projects:

1. "Implementation of a computerized method for measuring pain on irritation of deep mechanoreceptors and its testing in healthy (trained and untrained) and patients" 2008 - 2010. The project is funded by the Research Fund - MES and SWU "Neofit Rilski" in Blatoevgrad

2. "Construction and probation of a scientific complex for assessment of physiological and biomechanical parameters in physical activity for the needs of kinesitherapy and sports" 2009-2010. The project is funded by the Ministry of Education and Science European Social Fund - Operational Program "Development of human resources" 2007 – 2013

3. Student internships - academic mentor, Blagoevgrad 2013-2015 "Business-innovative approaches for creating and updating for involved students in Social Activities, Speech Therapy, Kinesitherapy and Sports according in the needs of the labor market" . The project is funded by the Research Fund - MES and SWU "Neofit Rilski" in Blatoevgrad.

The monograph on "Rheumatoid arthritis complex diagnostic and therapeutic approach" provides a modern view of a comprehensive approach to diagnosis and treatment of patients with rheumatoid arthritis. Over the last decade, knowledge in the field of rheumatoid arthritis has undergone tremendous development in terms of elucidating the etiology and pathogenesis. New modern diagnostic methods are introduced, the horizon for conservative therapy, subject to the latest requirements of the WHO, is expanded.

Undoubtedly, the changes taking place in rheumatoid arthritis have been unlocked by the development of a number of new effective therapeutic agents and methods to treat the disease. In the monograph we present in a modern light and in sufficient volume the necessary complex knowledge for specialists in medical rehabilitation, kinesitherapy and occupational therapy in terms of rheumatoid arthritis.

In the papers submitted for review, scientific and applied results have been achieved and problems with contributions in the following areas and directions have been studied:

- Complex kinesitherapy and occupational therapy in patients with rheumatoid arthritis - methods for assessing the function and quality of life of patients with rheumatoid arthritis have been tested; improvement of research methods in kinesitherapy practice; optimization of the program for working with patients with rheumatoid arthritis; introduction of a new complex methodology for optimal results;

- Innovative physiotherapeutic methods and kinesitherapy: the advantages of new technologies in patients with diseases of the musculoskeletal system; complex application of shock wave therapy, deep oscillations, kinesitherapy, occupational therapy, kinesiotaping; therapeutic effect in different stages;

- Modern methods for studying the quality of life of patients with rheumatic diseases: application of tests recommended by EULAR in a real situation; assessment of the patient's condition; approbation of appropriate complex therapy for improving the quality of life;

- Kinesitherapy, ergotherapy and ergonomics in rheumatoid arthritis: complex therapeutic effect; optimization of the kinesitherapy program with elements of ergotherapy and ergonomics; introduction of ergonomics for optimal results; application of ergonomics at work and at home;

- Kinesitherapy in pediatrics: a comprehensive assessment of the degree of retardation in neuro-motor development in children 0-12 months; teaching methods for parents regarding baby language and child development; application of a complex multisensory kinesitherapy program; prevention of children with neuro-motor developmental delay; comparison of multisensory kinesitherapy methods with other similar methods;

- Kinesitherapy and kinesiotaping function and effect: assessment of the function and effect of placing a kinesiological tape; studies on the possibilities of complex application of kinesitherapy and kinesiotaping in patients with

orthopedic and neurological pathologies; optimization of the kinesitherapeutic approach, such as enriching the program with kinesiotaping;

- Occupational therapy and complex kinesitherapy for people with disabilities: the development of programs for complex application of kinesitherapy and ET; experimental application of ET elements;

- Limit states of health, body weight and obesity: analysis of methods for diagnosing obesity; assessment by fat mass and body mass; a new approach to diagnosing obesity.

### **Teaching activity**

Assistant Professor Natalia Petrova carries out teaching activities at the Medical Faculty of Sofia University "St. Kliment Ohridski" from 2017 in the following specialties and disciplines:

- Specialty "Medical Rehabilitation and Occupational Therapy" - Occupational Therapy and Ergonomics - I, II, III part, Massage, Kinesitherapy for internal diseases - I, II part.

The study load of Natalia Petrova for the last three years is as follows:

- 2017/2018 school year - 180.0 hours of exercises
- 2018/2019 school year - 60.0 hours of lectures and 150.0 hours of exercises
- 2019/2020 academic year - 165.0 hours of lectures and 75.0 hours of exercises.

The documents submitted by Natalia Petrova meet the minimum national requirements and criteria of Sofia University "St. Kliment Ohridski" for holding the academic position of "Associate Professor".

### **Minimum requirements by group of indicators for the academic position "Associate Professor"**

Group of indicators	Associate Professor	Candidate Natalia Petrova
A	50	50 т.
B	-	-
B	100	100 т.

Г	200	260,5 т.
Д	50	230 т.
Е	-	-

### **Conclusion**

Natalia Petrova's research and teaching activities show her deep interests and desire for development in the field of kinesitherapy. The submitted documents for participation in the competition correspond to the minimum requirements for holding the academic position "Associate Professor" in Professional field 7.4. Public health (Kinesitherapy), specified in the Regulations for the conditions and procedure for acquiring scientific degrees and holding academic positions at Sofia University "St. Kliment Ohridski ". The above gives me reasons to recommend to the Honored Scientific Jury to award Assistant Professor Natalia Petrova Petrova the academic position of "Associate Professor".

27.11.2020

Prepared the opinion:

Assoc. Prof. D. Ivanova, Ph.D