

## SHORT REVIEW

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### ABOUT

Competition for the academic position "Associate Professor", Professional field 7. "Health and Sports" in the professional field 7.4 "Public Health" (Kinesitherapy), announced in the "State Gazette", p. 67 / 28.07.2020 Order № ПД 38-510 / 22.10.2020 of the Rector of Sofia University "St. Kliment Ohridski" for appointment of a Scientific Jury and decision of the Faculty Council of the Medical Faculty, at Sofia University "St. Kliment Ohridski" protocol № 81 / 28.09.2020

### Description of submitted documents for the competition

Natalia Petrova Petrova presents the necessary documents for participation in a competition for the academic position "Associate Professor" according to the Law for the development of the academic staff in the Republic of Bulgaria:

Diplomas and CV

Reference for study employment

List of scientific publications and participations in congresses and symposia

Abstract of Dissertation

Monograph, participation in research projects

List of contributions, citations, publications

### Biographical data

Date of birth: August 21, 1974

#### Education:

September 1995 - July 1999, Bachelor, Kinesitherapy, SWU "Neofit Rilski", Blagoevgrad.

September 2007 - July 2010, Master, Educational Management, SWU "Neofit Rilski", Blagoevgrad.

October 2013 - May 2015 – Ph D, Kinesitherapy, SWU "Neofit Rilski", Blagoevgrad.

#### Place of work:

September 2000 - July 2016 - Chief Assistant, Department of Kinesitherapy, SWU "Neofit Rilski" Blagoevgrad.

Basic physiotherapist in Pphysiotherapy and Rehabilitation Center "Faith, Hope and Love", Dr. Evelina Nikolova - Blagoevgrad.

January 2017 - until now - part-time assistant, Sofia University, St. Kliment Ohridski".

### More important courses in which Natalia Petrova participates

Karin Dom Center for Children with Special Needs Bobath Introductory - New methods for working with children with cerebral palsy - 2003

Kinesioteping course - NSA "V. Levski" Sofia 2006

Course for working with children with Down syndrome - 2009

Workshop with Brian Mulligan - May 2017

### **Research activity**

In participating in this competition, Natalia Petrova Petrova presents a list of 52 scientific papers: dissertation abstract, author's monograph, co-authorship in the manual of occupational therapy, scientific publications in local and foreign journals, reports and announcements from participation in international and national forums. 25 publications are accepted for participation in the competition - one of them abroad, one monograph and 23 in scientific periodicals in Bulgaria. As an additional asset, 15 participations in congresses and conferences in our country with published summaries and 12 participations in scientific national forums are presented.

PhD diploma № 0162 / 12.06.2015, topic: "Role of Kinesitherapy in Improving the Quality of Life in Patients with Rheumatoid Arthritis."

As the first author in an author team she is in 5 of the titles, and as the second - in 2 and as a co-author in 16 of the works.

The candidate in this competition submits a reference from the Central Medical Library for 30 citations found in the Bulgarian scientific periodicals.

### **Participation of Natalia Petrova in research projects**

"Implementation of a computerized method for measuring pain on irritation of deep mechanoreceptors and its testing in healthy (trained and untrained) and patients"

"Construction and probation of a scientific complex for assessment of physiological and biomechanical parameters during physical activity for the needs of kinesitherapy and sports"

"Business-innovative approaches for creating and updating the curricula for training students in Social Activities, Speech Therapy, Kinesitherapy and Sports in accordance with the needs of the labor market"

### **Academic Teaching Activity**

The reference for study employment from the Dean of the Medical Faculty of Sofia University "St. Kliment Ohridski" certifies that as a part-time lecturer N. Petrova has spent 120 lecture hours for the academic year 2018/2019 and 165 hours for 2019/2020. As a participant in examination commissions the dean's office counts 118.8 hours or a total of 690 hours of classroom employment.

The exercises led by N. Petrova for 2017/2018 are 180 hours, for 2018/2019 - 150 hours and for 2019/2020 - 75 hours, or a total employment of 808.8 school hours.

### **Scientific activity**

1. Complex assessment of the effect of kinesitherapy and occupational therapy in patients with rheumatoid arthritis: Approves methods for assessing the function and quality of life of patients with rheumatoid arthritis, Introduces a new complex methodology for optimizing the results. It uses a standardized SF-36 test in combination with other traditional research methods in kinesitherapy, Implements a new kinesitherapy program enriched with occupational therapy in the experimental group.

2. Introduces innovative physiotherapeutic methods in kinesitherapy, such as: Shock wave therapy, deep oscillations, kinesiotaping and monitors the therapeutic effect in different stages. It reveals the possibilities for application of innovations in physiotherapeutic practice in combination with kinesitherapy.

3. Kinesitherapy, ergotherapy and ergonomics in rheumatoid arthritis: Optimizes the kinesitherapy program with elements of ergotherapy and ergonomics. Introduces the application of ergonomics in the workplace and at home.

4. Kinesitherapy in pediatrics: Makes a comprehensive assessment of the degree of delay in neuro-motor development in children 0-12 months. Introduces teaching methods for parents regarding baby language and child development.

5. Kinesitherapy and kinesiotaping function and effect: Explores the possibilities for complex application of kinesitherapy and kinesiotaping in patients with orthopedic and neurological pathology. Develops programs for complex application of kinesitherapy and occupational therapy in patients with disabilities. Represents the pragmatic interaction between the individual and the environment. It clearly shows the four components that need to be emphasized in the kinesitherapy process.

6. Studies the borderline states of health, body weight and obesity. Offers a new approach to diagnosing obesity. Incomplete physical education classes lead to overweight and obesity.

**The candidate N. Petrova fulfills the minimum national requirements** to the scientific and teaching activity of the candidates for acquiring the scientific degree "Associate Professor" Area 7. Health and Sports, Professional Field 7.4. Public health (Kinesitherapy) and the additional requirements of Sofia University "St. Kliment Ohridski ". From the presented scientific report the following assessment is formed for the fulfillment of the respective criteria by groups: group A - 50 points, group B.4 - 100 points, group D.7 - 269.5 points, group D.8 - 20 points, group D.10 - 230 points.

#### **Personal impressions**

N. Petrova is a longtime lecturer and Head Assistant at the Department of Kinesitherapy, SWU "Neofit Rilski" Blagoevgrad. As a former head of the Department I have direct impressions of the candidate's work. N. Petrova shows exceptional professional responsibility in teaching, demonstrates high competence regarding the requirements and development of curricula and plans in kinesitherapy. She is familiar with and works freely with the normative documents concerning the higher education and the scientific field itself. In her teaching practice she is able to engage the attention and enjoys the respect of students. She carefully prepares and authoritatively presents her scientific work to an audience.

#### **Conclusion**

The scientific research, teaching and personal qualities of the candidate, as well as the presented documentation related to the scientific works and the teaching activity, meet the requirements of the Law for development of the academic staff in the Republic of Bulgaria and of the regulations for the conditions and the order for acquiring scientific degrees and holding academic positions in Sofia University "St. Kliment Ohridski ". All this gives me reason to vote positively for the award of the academic position of "Associate Professor" to Natalia Petrova Petrova.

I propose to the Scientific Jury and to the members of the Faculty Council of the Medical Faculty at Sofia University "St. Kliment Ohridski " to support the election for the academic position "Associate Professor ", Field of higher education 7. "Healthcare and Sports" in the professional field 7.4 "Public Health "(Kinesitherapy) of Natalia Petrova Petrova.

29.11.2020  
Sofia, BG

Prof. R. Kastelev, MD, PhD