

REVIEW

by Prof. Dr. Fani Georgieva Martinova, Ph.D.,
member of a scientific jury,
determined by Order No. RD-26-2025/18.10.2023 of the Executive Director of
UMBALSM "N. I. Pirogov" EAD - Sofia
on a competition for the academic position "Professor"
in the field of higher education 7. Health care and sports by profession
direction 7.1. Medicine and scientific specialty "Internal diseases" for the needs of
Internal Medicine Clinic - UMBALSM "N. I. Pirogov" EAD

I. CONTEST BRIEF INFORMATION

The competition for the academic position "Professor" is announced in the State newspaper, no. 46 of May 26, 2023, following a decision of the Scientific Council and by order of The executive director of UMBALSM "N. I. Pirogov" EAD.

According to the decision of the first meeting of the scientific jury, I am determined to prepare the present review in the contest. I have no conflict of interest regarding this competition.

The procedure for announcing the competition is in accordance with the requirements of the Law on development of the academic staff in the Republic of Bulgaria (ZRASRB) and the Regulations for the terms and conditions for acquiring scientific degrees and holding academic ones positions in UMBALSM "N. I. Pirogov" EAD.

Only one candidate participated in the competition - associate professor Dr. Petar Yordanov Atanasov, MD.

The submitted documentation is complete, neatly arranged and in accordance with the requirements of ZRSARB, PPZRAS and the Regulations for the Development of the Academic Staff (PRAS) in UMBALSM "N. I. Pirogov". The candidate has submitted administrative documents in electronic form documents (autobiographical reference, declaration of credibility of the prepared and presented documentation), as well as documents for specializations, for scientific and educational activity (certificates and diplomas, certificate of internship in the specialty, general list of scientific publications and publications after the last habilitation, reference for the citations, author reference for the contributions, habilitation reference, reference declaration for fulfillment of the

minimum national requirements for participation in the competition for the academic position "Professor").

II. BIOGRAPHICAL AND PROFESSIONAL INFORMATION ABOUT THE CANDIDATE

2.1. Brief biographical data

Associate Professor Dr. Petar Yordanov Atanasov was born on 27.05.1962 in the city of Sofia. Finishing secondary high school education in the town of Kyustendil in 1980. In 1988 he graduated higher medical education at the Medical Academy - Higher Medical Institute - Sofia.

Associate Professor Dr. Atanasov has 35 years of continuous medical clinical work experience. Through In 1988, he started working as a resident doctor in the 1st internal department of the ORB city.

Kyustendil, and since the beginning of 1991 he has been the head of the Intensive Sector of the same department.

From 1992 to 2013, he worked as an internist at the Internal Medicine Clinic - "Pirogov" UMBALSM, and from 2013 to 2014 as a hematologist at the Clinic for transfusion hematology and immunology - UMBALSM "Pirogov". From February 2014 After a competition, he was appointed to the position of "Assistant" at the same clinic.

From March 2014 to the present, he is the Head of the Internal Medicine Clinic diseases in "Pirogov" UMBALSM.

2.2. Acquired specialties

During his professional career, Assoc. Dr. Atanasov has acquired specialties in Internal Medicine (1993), Clinical Hematology (2000), Emergency Medicine (2020), Scientific Medical Information (1986), and Management (1989).

2.3. Defense of dissertation and habilitation

From 15.02.2016, Dr. Petar Atanasov was awarded an educational and scientific degree "Doctor" (in the scientific specialty "Internal Diseases"), after successfully defended dissertation work on "Epidemiology and etiology of anemia in urgently hospitalized patients over the age of 80" (12.01.2016).

From 19.12.2016 after winning a competition announced in the "State Gazette", based on

decision of the Scientific Council and order of the Executive Director, Dr. Petar Atanasov e appointed to the academic position "Docent" in the scientific specialty "Internal Diseases" at the Internal Medicine Clinic of UMBALSM "N. I. Pirogov".

III. RESEARCH ACTIVITY

Evaluation of the candidate's scientific works during the entire academic period development

3.1. Total number of scientific publications

In the current competition, Prof. Dr. Petar Atanasov presents himself with the following scientific production:

- Dissertation work and abstract - 1 issue
- Articles related to the dissertation - 4 pieces
- Published book based on a defended dissertation for the award of educational and scientific degree "doctor" - 1 item
- Participation in published university textbooks – 2 issues
- Articles that have not been submitted for participation in another contest - 50 pieces

The dissertation work is not reviewed in the competition, but according to the requirement of ZRASRB must be presented because it evaluates itself as a scientometric indicator with 50 points.

According to the requirements of ZRASB in the competition for the academic position "Professor" of 53 scientific works of Prof. Dr. Atanasov, published, are subject to review and evaluation after the last habilitation in the period 2017 – 2023:

- 37 articles in foreign scientific journals;
- 13 articles in Bulgarian scientific journals;
- published book based on a defended dissertation work: "Basic characteristics (frequency, prevalence, causes) of the anemic syndrome in patients over the age of 80, hospitalized in an emergency", MU, Sofia 2023;
- participation in two published university textbooks

3.2. Evaluation of publications

Ten (10) of the articles published in refereed scientific journals are presented

(Scopus/Web of Science), with 6 of them in journals with an impact factor. The total number of points according to scientometric indicator B4 is 100.83, out of 100 points according to the national standards requirements.

Seven (7) articles have been published in scientific publications, referenced and indexed in world-renowned databases of scientific information.

Thirty-three (33) articles have been published in peer-reviewed journals peer reviewed or published in edited collective volumes.

The published book based on the defended dissertation work "Basic characteristics (frequency, prevalence, causes) of the anemic syndrome in patients over the age of 80, hospitalized in an urgent order" and those specified 40 articles were evaluated together according to scientometric indicator G7 with 532.19 points - out of 400 points according to national requirements.

The total impact factor of the publications of Associate Professor Petar Atanasov after the last one habilitation is IF= 82.91.

Articles in foreign scientific journals are published in: New England J. of Medicine (NEJM), World J. of Pharmacy and Pharmaceutical Sciences, Pharmacia, J. of Multidisciplinary Engineering Science Studies, Int. J. of Current Research, Infect. Diseases and Therapy, Research in Medical Science, Knowledge Int. J., Current Organic Chemistry.

The articles in Bulgarian scientific journals are published in: Emergency Medicine, Science Pharmacology, Science Pulmonology, Dermatology and Venereology, Bulgarian hepatogastroenterology.

The candidate's scientific activity also includes 22 scientific reports and communications delivered at one international and at 21 Bulgarian scientific forums.

3.3. Authorship

From the list of publications provided, I found that Assoc. Dr. Atanasov is the leader author (first, last or one of a total of two authors) in 44% of all presented in competition publications and in 43% of publications with an impact factor.

3.4. Quoted

The reference of the Central Medical Library (CMB) for the citations of the publications of Assoc. Dr. Atanasov show that they have discovered:

- 31 citations in Bulgarian sources from the CMB library fund,
- 220 citations in foreign sources Scopus (Elsevier),

- 195 citations in foreign sources Web of Science (Clarivate) and
- 25 citations in other foreign freely available online sources

The score for the citations from the Scopus and Web of Science databases is 2115 points and the score for citations or reviews in non-refereed peer-reviewed journals is 195 points, i.e. 2310 points in total according to indicator group D. No data were presented by CMB on the number of citations of individual publications.

3.5. Participation in research projects

1. "Role of Individual Virus/Host Genomic Characteristics for Response to SARS-Co-2 infection", based on a study conducted by the Scientific Research Fund "Competition for financing fundamental scientific research on social challenges related to the Covid-19 pandemic-2020 - team leader Assoc. Dr. Petar Atanasov
2. "Immunological memory in SARS-CoV-2/COVID-19: mechanisms, duration and cross-reactivity", based on a study conducted by the "Scientific Research" Fund "Competition for financing fundamental scientific research on social challenges related to the 2020-2020 Covid-19 pandemic."

IV. CONTRIBUTIONS FROM SCIENTIFIC RESEARCH ACTIVITY

The scientific research activity of Petar Atanasov, PhD, is related to the activities of The Internal Medicine Clinic of the UMBALSM "N. I. Pirogov". Except for the basics clinical specialties Internal Medicine and Emergency Medicine, a number of studies are related to the specialties Clinical Hematology, Clinical Toxicology, Pulmonology, Endocrinology, Gastroenterology, Nephrology, Rheumatology, Cardiology, Dermatology, Allergology, as well as with the areas of Clinical Pharmacology, Clinical Pharmacy, Pharmaceutical Chemistry.

The scientific contributions of Assoc. Dr. Petar Atanasov are scientific-research and practical and are summarized in the author's reference in the following directions:

- Studies in the field of internal medicine
- Studies in the field of clinical hematology and clinical toxicology
- Chemical-pharmaceutical studies to prove the structure-activity dependence of medicinal products
- Studies in the field of clinical pharmacology and clinical pharmacy
- Studies in the field of pharmaceutical toxicology and pharmaceuticals Analysis

1. Studies in the field of internal medicine and emergency medicine conducted for first time in Bulgaria:

- the epidemiology and the nosologically determined causality were studied relationship in emergency patients with anemia aged over 80 years
- frequency, clinical, diagnostic and therapeutic manifestations are systematized algorithms in emergency situations caused by atypical viral infections
- the epidemiology, the severity of the course, the algorithms for diagnosis and treatment of those urgently ill with rare parasitic infestations
- studies in emergency patients with coronavirus infection on:
 - ⊗ the course of moderate and severe form of complicated coronavirus infection (Coronavirus Pneumonia) in patients in different age groups
 - ⊗ the type and frequency of organ involvement in moderate and severe forms of complicated a coronavirus infection
 - ⊗ comorbidity in patients with moderate and severe forms of the coronavirus infection and the possible causal relationship between the severity of the course, the complications that occurred, the duration of the course and the mortality with the relevant co-morbidity/s
 - ⊗ mortality in patients with moderate and severe forms of coronavirus infection in different age groups without accompanying diseases and in patients with one, two or more accompanying diseases
 - ⊗ the frequency of organ and system complications in moderate and severe forms of coronavirus infection
 - ⊗ the frequency, severity and duration of moderate and severe forms of Corona viral infection in patients of different age groups with one, two and more accompanying diseases
 - ⊗ follow-up of patients of different age groups in the post-covid period, with the aim establishment of possible laboratory correlations with the experienced Coronavirus infection within one and two years
 - ⊗ follow-up of patients in the post-covid period with research and analysis of the immune response, according to the levels of specific anti-SARS-CoV2-IgG and anti-SARS-CoV2-Ig-Total, within the first and second year after discharge
 - ⊗ follow-up of patients in the post-covid period (2 years) by conducting an RTPCR test twice a month, in order to establish possible re-infection with coronavirus
 - ⊗ study of the frequency of moderate and severe forms of coronavirus infection

in smokers and non-smokers and analyzing the severity, frequency of complications and the duration of their complicated coronavirus infection

2. Studies in the field of clinical hematology and clinical toxicology, held for the first time in Bulgaria on:

⊗ the frequency and causes of perimorbid anemic syndrome and thrombocytopenia in different age groups of patients, with moderate and severe form of a coronavirus infection

⊗ study and analysis of mortality among patients with malignant diseases of hematopoiesis, from different age groups and with medium severity and severe form of coronavirus infection

⊗ the frequency of lymphocytopenic conditions among different age groups patients, with and without a defect in humoral immunity, in the course of moderate and severe form of coronavirus infection

⊗ the causes of iatrogenic agranulocytosis, due to violations of the dosage regime at treatment with antimetabolites

⊗ the frequency and severity of acute intoxications with heavy metals (in particular, lead) in industrial accidents and their related complications and impairment of hematopoiesis in these patients

⊗ the epidemiology of domestic intoxications, with studies on the toxic effect of specific antipyretics, antiphlogistics, antibiotics and medicinal preparations for treatment of secondary fungal infection used in the treatment of moderate and severe coronavirus infection

⊗ the hepatotoxicity of fluorinated triazoles in conditions of fungal infection prophylaxis of patients on long-term antibacterial therapy on the occasion of moderate and severe form of coronavirus infection, having been administered protocols for complex hepatoprotective therapy in them.

3. Chemical-pharmaceutical studies to prove the structure-activity relationship of medicinal products - for the first time in Bulgaria

⊗ clinical-laboratory study of the biological properties of Coumarins. Results of research on the relationship between structure and activity of newly synthesized compounds from this group, a comparative study was carried out analysis of own results with those in the world medical and pharmaceutical practice and practical algorithms have been created to clarify the mechanism of their action

⊗ generalized analytical and pharmacological studies on the influence of components with biological and antioxidant activity used in food supplements (unsaturated Omega-3 fatty acids, amino acids, vitamins, xanthines), in medicines (Galantamine - cholinesterase inhibitor - for the treatment of mild to moderate dementia associated with alzheimer's disease sartans – new generation of antihypertensive agents, beta-lactam antibiotics, Platinum containing complexes, etc.)

⊗ the contribution of the mentioned studies is that in their analytical part they are applied validation methods with high accuracy, precision, specificity and reproducibility - densitometry with a TCX-densitometer, UV spectrophotometry, HPLC (High Performance Liquid Chromatography) and HPLC (High Performance Liquid Chromatography), to study the radical-binding activity. The contribution of the studies are also in relation to drug and food control additives, as well as for their regulation in terms of quality, chemical stability, pharmacological activity and efficacy and safety.

4. Studies in the field of clinical pharmacology and clinical pharmacy, performed for the first time in Bulgaria

⊗ studies on the effect of newly synthesized active substances from the group of Galantamine peptides on the growth and survival of cell cultures from 3T3–mouse embryo fibroblasts

⊗ studies regarding amino acid levels in nutritional supplements, offered on the Bulgarian pharmaceutical market, as well as an analysis of the effectiveness of analytical control

⊗ the possibilities for the prevention of some socially significant diseases have been studied, under the influence of regular intake of Omega-3 polyunsaturated fatty acids as nutritional supplements

⊗ studies and summarized results of modern pharmacological experience from the clinical application of the medicinal group of antihypertensive agents Sartans in patients with hypertension

⊗ studies on the prophylactic effect of oral essential oils and the adjuvant therapeutic effect of a number of immunomodulators of plant origin in an epidemic from seasonal viral diseases

⊗ long-term study, over one year, of the clinical effect of the application of preparations containing anti-SARS-CoV2 monoclonal antibodies, as it has been traced the immune response and possible side effects in patients with coronavirus infection treated with these preparations

5. Studies in the field of pharmaceutical toxicology and pharmaceutical analysis

⊗ for the first time in our country, a TLC-densitometric methodology has been validated for routine control of the qualitative composition of Amoxicillin, Beta-lactam antibiotics, Valsartan and Hydrochlorothiazide in different dosage forms

⊗ a chemical analysis of the composition of food additives announced as "not containing compounds with androgenic activity", for the presence of ingredients from "non-hormonal" nature, having assessed the risk of uncontrolled use of freely available dietary supplements of this group, which can be prohormonal metabolites for the biosynthesis of anabolic steroids in the body

⊗ for the first time, studies were conducted on the long-term effect on health of professional athletes using food for "natural stimulants" herbal supplements containing plant substrate

V. EDUCATIONAL AND TEACHING ACTIVITY

Associate Professor Dr. Petar Atanasov actively participates in the teaching and learning process at UMBAL SM "Pirogov", in the training of medical students and interns, in the management of specialists and doctoral students, in conducting courses for postgraduate studies, in state examination boards in "Internal Diseases" and "Emergency Medicine".

Assoc. Dr. Atanasov's audit workload includes:

1. Lectures "Emergencies in Internal Medicine" for specialists, lectures "Emergency pulmonary conditions and syndromes" of VI year students, project lectures PULSS "Practical introduction to the treatment of emergency conditions"

2. Practical exercises for VI year students.

The candidate's audit workload for the period 2020-2023 is a total of 300 hours. Lectures: 100 hours for postgraduates, 80 hours for 6th year students, 60 hours for emergency care specialists from CSMP. Exercises - for VI year students - 130 hours Extracurricular employment includes: participation in colloquium commissions (100 hours), head of training in modules Internal Medicine, Gastroenterology, Oncology, Endocrinology, Cardiology, Nephrology (150 modules) (for 2023, 20 modules of 30 days each) Teaching and methodical activity: development of lectures (110 hours), editing of materials for

"Emergency Medicine" magazine (110 hours), head of research projects (360 hours), conducting collegiums (80 hours)

PARTICIPATION IN PUBLISHED UNIVERSITY TEXTBOOKS

1. Konstantinov, S. M., G. T. Momekov, P. Y. Atanasov and team. Pharmacotherapeutic approaches in Emergency Medicine. Pharmacotherapy. Second Revised Edition. Softtrade – 2019 : 869-880/903-904.
2. Yankova, Zl., I. Petrov, P. Atanasov and team. Pulmonary hypertension and pulmonary embolism. Pulmonary hypertension in diseases of hematopoiesis. Central medical library. Medical University of Sofia. 2022 :61-70.

CONTRIBUTIONS TO TEACHING VALUE

1. For the first time in our country, a study was conducted and an analysis was made of the forms for independent work (self-study and self-training) for students in Bulgarian medical colleges.
2. For the first time in international scientific literature, modern aspects of the training of Bulgarian health specialists from various medical fields colleges and an analysis of the professional realization of these specialists was carried out and their role in the modern Bulgarian healthcare system.
3. For the first time in the conditions of an epidemic crisis, parallel methods were applied training of medical teams, health care specialist teams and medical assistants in order to ensure a continuous diagnostic and treatment process in the structures of UMBALSM "N. I. Pirogov", where admission and treatment are carried out of patients with coronavirus infections.
4. For the first time in a hospital where diagnosis and treatment of infectious diseases, algorithms for training of diagnostic and treatment teams in accelerated terms under programs providing adequate meeting nationally significant epidemic challenges posed by The coronavirus epidemic affected the country in the period 2020-2022.
5. For the first time within the framework of UMBALSM "N. I. Pirogov" were created specialized volunteer training teams to work with patients hospitalized in emergency order, on the occasion of a medium and severe form of a coronavirus infection. In conclusion, In the current competition, associate professor Dr. Petar Atanasov presents himself as established a specialist with long medical, research and teaching experience. There is recognized medical specialties in internal medicine, clinical hematology,

emergency medicine and specializations in management and scientific medical information, he defended his thesis and is a "doctor" of medicine. He passed the academic ladder from assistant to associate professor and has significant administrative experience as a supervisor of the Internal Medicine Clinic at the prestigious institution UMBALSM "N. And. Pirogov". The scientific output of associate professor Dr. Petar Atanasov, according to the presented reference for scientometric indicators, supported by original evidence, covers or exceeds the minimum national requirements and the requirements of UMBALSM "N. And. Pirogov" according to the individual indicators. The assessment of the overall career development, research, teaching and organizational-administrative activities of associate professor Dr. Petar Atanasov shows that the candidate fully meets the criteria of ZRASRB and the requirements of UMBALSM "N. I. Pirogov" EAD to occupy the academic position "Professor" in the scientific specialty "Internal Diseases".

On these grounds, I support his candidacy and suggest to the honorable members of The Scientific Jury to vote positively and propose to the Executive Director of UMBALSM "N. I. Pirogov" EAD associate professor Dr. Petar Yordanov Atanasov, MD, to occupy the academic position "Professor" in the scientific specialty "Internal Diseases" for the needs of the Internal Medicine Clinic.

11/26/2023 Reviewer:

Sofia

Prof. Ph.D. Fani Martinova, dmn