EXPERT STATEMENT

by Prof. Dr. Danka Petrova Obreshkova, PhD
Regarding the competition for academic position 'Professor'
Area: Higher Education, 7. Healthcare and Sport
Professional field: 7.1. Medicine
Specialty: Internal Medicine
for the needs of the Clinic of Internal Medicine, University Emergency Medicine Hospital 'N. I. Pirogov', Sofia, announced in the 'Official Journal', 2023, vol., 46, published May 26, with only candidate - associate profesor Dr. Petar Yordanov Atanasov PhD. A complete set of documents has been submitted for the competition, in accordance with the requirements of the 'Law of the Development of Academic Staff in Republic of Bulgaria' and the 'Regulations on the Development of Academic Staff of University Emergency Medicine Hospital 'Pirogov'.

Assosiate professor P. Atanasov has acquired a master's degree in Medicine from the Medical University, Sofia, graduating with distinction in 1988. Before graduation he had already obtained a specialty in 'Medical Informatics' at Medical University, Sofia. In 1989, he acquired a diploma in 'Healthcare and Management' and after that went through a residency program in Internal Medicine, passed a state exam and was certified to work as specialist (1993). In 2000 he became a specialist in Clinical Hematology. He successfully passed the state exam and acquired third specialty Emergency Medicine at Faculty of Medicine, Medical University, Sofia in 2020. All these facts speak of assoc. prof. Atanasov's continuous pursuit of knowledge and progress. In 2016, dr. P. Atanasov obtained the degree Doctor of Medical Sciences and Internal Medicine, after successfully defending a doctoral thesis on the topic: 'Epidemiology and Etiology of Anemia in Urgently Admitted to Hospital Patients Aged 80 and Older' and from the same year holds the position assistant professor in Internal Medicine.

It is clear that assoc. prof. P. Atanasov has walked a full path of professional development and academic career. At present, assoc. prof. P. Atanasov holds the position of Head of the Clinic of Internal Medicine at University Emergency Medicine Hospital 'N.I. Pirogov', Sofia. As such, he enjoys exceptional trust and respect from colleagues and patients. He is known for his dedication to work and treatment of patients with competency.

Teaching activity

Dr. P. Atanasov is associate professor at the Clinic of Internal Medicine in University Hospital 'N. I. Pirogov', with a significant employment in lectures and practice training of students and physicians in training in 'Internal Medicine' and 'Emergency Medicine'. According to a reference to his academic curriculum, his workload in the last four years includes 660 hours of methodical educational activity, 225 hours of auditory employment, 100 hours of non-auditory employment. Also, he participates in semester and state exams of students in Medicine and physicians in training. As a lecturer, he participated in the continuing training of emergency physicians within the projects of the Ministry of Health – 'PULSS -1' and 'PULSS – 2'.

He is currently the supervisor of three physicians in training in Internal Medicine, of two full-time doctoral students in specialty Pharmacy, of one doctoral student in free form in Emergency Medicine. He has one successfully defended doctoral student in Internal Medicine.

Dr. P. Atanasov played central role in creating, training and organizing the work of specialized teams of volunteers within University Hospital 'N.I. Pirogov' caring for patients hospitalized with moderate and severe COVID-19 infection during the outbreak in 2020-2022. The teaching activity and experience of assoc. prof. P. Atanasov give grounds for saying that he is established and progressive academician.

Scientific activity

Dr Atanasov's has significant contribution as co-author in the writing of manuals that are in aid of students and other trainees in different disciplines, namely: 'Pharmacology and Pulmonary Diseases: Pharmacotherapy' by SM Konstantinov, GT Momekov, PY Atanasov, at al., 'Pharmacotherapeutic approaches in Emergency Medicine. Pharmacotherapy'. 2nd ed 2019: 869-880/903-904. (ISBN: 978–954–334–211–2) by Z Yankova, I Petrov, P Atanasov, et al. and 'Pulmonary hypertension and pulmonary embolism. Pulmonary hypertension in diseases of hematopoiesis.' Central Medical Library. Medical University of Sofia. 2022: 61-70. (ISBN: 978–619–7491–43–2). The research papers of prof. Atanasov also include a book based on his PhD thesis entitled 'Main Characteristics: Incidence, Prevalence, Causes of Syndrome of Anemia in Patients Aged 80 Years and Older Subject to Urgent Admission to Hospital' (published in 2023).

Considering the presented qualitative scientific characteristics and the volume of the published research work of Assoc. Professor Atanasov meets and exceeds the requirements of the Law on Academic Staff Development in Republic of Bulgaria and the Regulations for the Development of the Academic Staff of the University Hospital 'Pirogov'.

A review of the publications of assoc. prof. Atanasov shows 10 publications indexed in world databases (indicator B4), of which 5 publications are in journals with IF. A list of 41 publications are referred in the National Reference List (indicator G7) and with a book based on his PhD thesis was also provided. Assoc. prof. Atanasov reports 22 distinct reports at scientific forums at home and abroad.

Dr. Atanasov took part in two scientific projects: 'Immunological memory in SARS-CoV-2/COVID-19: mechanisms, duration and cross-reactivity', funding grant No. KP-06-DK1/9 (March 29, 2021) and a joint project with non-university institution and one research project funded by the Faculty of Pharmacology, Medical University, Sofia A reference list of the citations of assoc. prof. Atanasov according to the Central Medical Library of Medical University, Sofia includes 440 citations in foreign scientific journals and 31 authors from Bulgaria (indicator D10). Additional citations are also provided. The candidate's total impact factor of publications is impressive - 82.91.

Contributions of theoretical and scientific-practical value in the field of: Internal Medicine, Hematology, Pharmacy, Pharmacotherapy; experimental laboratory studies; Pharmaceutical Chemistry, etc. can be found in dr Atanasov's research papers. Under the leadership of Assoc. Prof. Atanasov the Clinic of Internal Medicine of University Hospital 'Pirogov' received new certification for training physicians in clinical training program and PhD program in 'Internal Medicine' and 'Emergency Medicine'. Research activities in the field of Clinical Pharmacology, Clinical Pharmacy, Immunology and Immunohematology and a number of registered clinical trials related to the diagnosis and treatment of rare diseases in the scope of the specialties: Internal Medicine, Pulmonology, Endocrinology, Gastroenterology, Nephrology, Hematology, Immunology, Rheumatology, Cardiology, Dermatology, Allergology are periodically carried out in the clinic. Assoc. prof. P. Atanasov aims to study and prove the perspectives in these areas that are linked to Internal Medicine. This is a prerequisite for his multifaceted scientific activity in parallel with his dedicated work as a physician and the continuous care to the patients.

His main contributions are in the field of Internal Medicine, can be synthesized in the following areas:

-research on the epidemiology and the relationship of comorbidities with anemia in patients aged 80-years and older, urgently admitted to hospital;

-systemic study on the incidence and aberrant clinical manifestations in internal medicine emergencies caused by atypical viral infections;

-diagnostic and therapeutic algorithms for internal medicine emergencies caused by atypical bacterial infections, parasitic infections and of moderate and severe complicated coronavirus pneumonia have been proposed.

Assoc. prof. Atanasov has made a particularly great contribution in the study of the condition of patients of different age groups for the type and incidence of organ involvement in moderate and severe complicated coronavirus infection, tracking mortality in patients with moderate and severe coronavirus infection of different age groups without co-morbidities, as well as in patients with one, two and more than two co-morbidities.

Associate professor P. Atanasov has significant contributions in the field of CLINICAL TOXICOLOGY AND CLINICAL HEMATOLOGY. His scientific reports have been related to incidence and severity of acute intoxications with lead and with the related impairment in hematopoiesis; to the epidemiology of the domestic intoxications with home-grown plants, including herbal treatment (and self-treatment). He has proposed modified algorithms for the diagnosis, prevention and treatment of household intoxications with agricultural poisons and the related manifestations of bone marrow failure. He has conducted research on specific toxic effect of particular antipyretics, antibiotics and medicinal preparations for the treatment of secondary fungal infection used in the treatment of moderate and severe coronavirus infection, etc.

Assoc. prof. Atanasov also has interests and achievements in the field of PHARMACOLOGY AND PHARMACY. He has conducted a study aimed to analyze and report in detail the properties of the most active compounds from the Coumarin anticoagulants. The results represent a variety of the properties of Coumarins (anticoagulant, antimicrobial, antispasmodic, antitumor, antioxidant, etc.) in systemized fashion. The research results on the structure-activity dependence of newly synthesized compounds from the Coumarin drug group are presented in order to determine the most effective substitutes in medical practice.

Assoc. prof. Atanasov participates in studies related the analysis of biologically active substances with steroid structure clarifying the relationship of chemical structure with activity. His conclusions on prevention and slowing the progression of socially significant diseases such as muscle-skeletal (osteoporosis, etc), neurodegenerative diseases by the application of specific medicinal therapy and nutritional supplements are of theoretical and practical significance.

Dr. P. Atanasov made substantial achievement in the field of pharmaceutical chemistry by the development of methods using high-performance liquid chromatography (HPLC) with UV detection of natural substances with antioxidant

potential (unsaturated omega fatty acids, amino acids, etc.) and of nutritional supplements, providing tool for determination, tracking and control of their content in organic food and medicinal preparations.

Of particular importance is his contribution to the research on the chemical stability, pharmacological activity and potential application of a new drug combination of Galantamine. Modern analytical methods for the determination of Galantamine by means of a thin-layer chromatographic densitometer and HPLC have been applied for the study of its radical-binding activity. A study providing evidence and characterizing the antitumor and antioxidant activities of platinum-containing complexes and their derivatives is another valuable contribution of dr. P Atanasov to the evolving knowledge in the field of pharmaceutical chemistry.

RESEARCH IN THE FIELD OF CLINICAL PHARMACOLOGY AND CLINICAL PHARMACY

The antiproliferative effect of novel peptides from the Galantamine group and effect on growth and survival of newly synthesized Galantamine esters in cell cultures from 3T3-fibroblasts of a mouse embryo were reported for the first time by dr. P. Atanasov and colleagues. An analysis of the effectiveness of the analytical control of the amino acid content in nutritional supplements offered on the Bulgarian pharmaceutical market was issued with the major contribution of dr. P. Atanasov.

A comparative analysis on the topic 'Regular intake of ω-3 polyunsaturated fatty acids as a food supplement' between a Bulgarian and an Eskimo populations, the latter known for its high intake of ω-3 PUFA with food was initiated and performed by P.Atanasov and colleagues.

Dr. P. Atanasov was also first author and co-author in analyses on the pharmacotherapeutic trends in the use of angiotensin receptor blockers ('Sartans') in clinical practice; the side effects of application of oral essential oils in the treatment of moderate and severe coronavirus infection; on the clinical effect of the therapy of SARS-CoV2 virus with monoclonal antibodies and on the dynamics of the immune response during two-year follow-up in patients of different age and gender, who have received anti-SARS-CoV2 monoclonal antibodies.

In conclusion, associate professor dr. Petar Yordanov Atanasov fully meets the requirements for acquiring the academic position of professor in Internal Medicine considering his teaching career and contributions to scientific theory and clinical practice. He also significantly exceeds the requirements set in the 'Law on the Development of the Academic Staff in the Republic of Bulgaria' and the 'Regulations on the Development of the Academic Staff of University Hospital 'N. I. Pirogov', Sofia. The

scientific metrics presented by assoc. prof. Atanasov for the occupation of the academic position 'professor' are convincing and exceed the required criteria (table 1).

Indicator	Content	Professor Minimum points according to the national requirements	Required points University Emergency Hospital 'N.I. Pirogov'	Results – scientific metrics of the candidate
A	Indicator 1	50	**50**	**50**
B	Indicator 2	-	-	-
C	Indicator 3 or 4	100	**100**	**100.83**
D	Sum of the indicators 5 to 9	200 (160 indicates 7.6)	**300**	**432.19**
E	Sum of the indicators 10 to 12	100	**100**	**2 310**
F	Sum of the inidcators 13 to the end	100	**100**	**541.6**
G	IF (requirement by University Emergency Hospital 'N.I. Pirogov', only)	-	**10**	**82.91**

Particularly impressive are the value of the citations (required 100 points, 2 310 are available) and the indicator IF - a required IF is 10, the candidate presents with an IF of 82.91. I propose to the esteemed jury to vote in support of appointment of associate

professor Petar Yordanov Atanasov, PhD, to the academic position of 'Professor' in Internal Medicine. My assessment is entirely POSITIVE.

November 10, 2023 Prof. D. Obreshkova, PhD, DSc