



Bw OPINION

about the competition for the academic position "Professor" in the field of higher education 7. Health and sports, professional direction 7.1 "Medicine", scientific specialty "Pathophysiology" at the Medical Faculty of the University "Prof. Dr. Asen Zlatarov", Burgas, named in "Darjaven vestnik", No. 105/11. 12. 2020

from Professor Dr. Iskren Kotzev, MD, PhD, Professor of Internal Medicine and Gastroenterology, Medical University, Varna

By Order No. RD-9/20. 01. 2021, of Rector of the University "Prof. Dr. Asen Zlatarov", Burgas, I was included as an external member of the scientific jury for the competition, and with the decision from the meeting of the scientific jury, I was appointed to make an opinion on the competition of the professor of the scientific specialty "pathophysiology" announced in the "Darjaven vestnik - State newspaper", announced by the University, Burgas in the "Darjaven vestnik", No. 105/11.12.2020. One candidate submitted regular documents for the competition on time – Prof. Dr. Ganka Yordanova Bekyarova, MD.

The assessment and final opinion are formed on the basis of the requirements of the Law On the Development of Academic Staff in Republic of Bulgaria since May 21, 2010, the Rules of its Application, 2011 and the rules on the conditions and procedure for acquiring scientific degrees and holding academic positions at the University "Professor. Dr. Asen Zlatarov", Burgas.

Professor Dr. Ganka Yordanova Bekyarova, MD had a scientific and educational degree "doctor" after successfully defending her dissertation in 1990 on the topic "Changes in the functional properties of red blood cells associated with free radical oxidation in heat injury " in the scientific specialty "pathophysiology", with a diploma 202301/20. 06. 1990 and the second degree of Doctor of Medical Sciences with diploma 076, issued on 19.12.2014, after successfully defending his doctoral dissertation "Investigations of some possible mechanisms of liver damage associated with oxidative stress in experimental heat injury and the role of melatonin in hepatoprotection" with major contributions to the role of melatonin as an antioxidant and hepatoprotector in heat injury.

In 1999 she was awarded the academic position of associate professor in the scientific specialty "pathophysiology", and in 2016 she was awarded the academic position of Professor of Pathophysiology from the Medical University, Varna, which facilitates the current choice.

Professor Ganka Yordanova Bekyarova, MD, has a 44-year medical practice. In 1977 she graduated from the Medical University in Sofia and started working as a doctor in the First polyclinic in Dobrich, where she worked until 1980. Since 1980 she has an academic career at the Department of Pathophysiology at the Varna Medical

University. In the period 1980-1984, she was an assistant at the department, and in 1985-1990, she was a senior assistant and a doctoral student. From 1989 to 1999 she was the chief assistant of the Department of Pathophysiology. In 1999 she was habilitated as an associate professor, and in 2016 as a professor.

Since 1984 she had the speciality in pathophysiology. He has a foreign language qualification in English, level B2 since 2010 and participation in the qualification project "Interactive teaching methods" since 2014.

Scientific research works

Professor Ganka Bekyarova has 2 dissertations, 9 textbooks and manuals, 73 scientific publications in extenso, 1 monograph in 2015 "Endothelial dysfunction, vascular oxidative stress, and cardiometabolic disorders: pathophysiological mechanisms and clinical application".

26 her scientific papers have been published in international scientific journals, of which 10 have an impact factor, and 25 of them are in Latin. 36 scientific papers were published in scientific journals in Bulgaria. 3 articles, published in Bulgarian scientific journals, are cited in international journals. 8 scientific papers were published in scientific volumes of works. The impressive number of published articles in extenso speaks to the high scientific activity and productivity of professor Bekyarova. The total impact factor of her works is IF=10,401, and according to Google Scholar H-index=11.

In all 73 scientific papers submitted for review, Professor Bekyarova was the first author in 53 publications, the second author in the 13 works, and the third and next author in 10.

Her scientific papers are in the field of pathophysiology of thermal trauma, free radicals and oxidative stress, experimental studies on the pathophysiological mechanisms of non-alcoholic fatty liver disease, experimental evidence of the hepatoprotective effect of melatonin and S-adenosylmethionine. Another group of publications describes the gastro- and hepato-protective properties of probiotics under experimental conditions. There are also publications related to modern approaches to teaching pathophysiology, which indicate her interest in this important academic topic.

Professor Bekyarova has published in authoritative scientific journals that are refereed in international scientific exchange and in scientific databases: "Burns", "Artificial cells", "Blood substitutes", "Immobilization and Biotechnology", "Finding Methods Experimental and Clinical Pharmacology", "International Journal of Immunopathology and Pharmacology", "Central European Journal of Medicine", "Molecules", and much more.

The applicant submitted a list of 191 citations of her scientific publications, refereed and indexed in the World database, or in a monograph, or in collective volumes. In other publications, prof. Bekyarova has 50 citations.

Professor Ganka Bekyarova has 1 published monograph in 2015. "Endothelial dysfunction, vascular oxidative stress, and cardiometabolic disorders: pathophysiological mechanisms and clinical application". In this monograph, for the first time in our country, a review and analysis of modern scientific ideas about the role of oxidative stress in endothelial dysfunction in cardiometabolic diseases - diabetes mellitus, arterial hypertension, obesity and obstructive sleep apnea was conducted. The role of early markers of endothelial dysfunction in increased cardiovascular and metabolic risk is discussed.

Professor Bekyarova makes innovative research in the field of experimental thermal trauma and the role of melatonin as a hepatoprotector, using a variety of modern research methods – biochemical, immunological, morphometric and immunohistochemical. Her research is always up-to-date and with original contributions, which arouses great scientific interest among research circles abroad and at home.

The main research areas in which professor Bekyarova successfully works are:

- Cellular and molecular mechanisms of liver damage in heat injury and hepatochrotection with melatonin
- Pathophysiological mechanism of cellulare damage under oxidative stress and protection with antioxidants and probiotics
- Experimental studies in metabolic syndrome
- Modern pedagogy in pathophysiology

In all the areas described above, Prof. Bekyarova has significant contributions, mainly in the pathophysiological mechanisms of thermal trauma, hepato-and gastrointestinal protection and cardio-metabolic syndrome. Her scientific products are original and have possible clinical applications. Summaries of her papers in 3 of her participation in international forums, were published in international journals with an impact factor $IF = 15.393$.

Professor Bekyarova is the head of three doctoral students in pathophysiology, of which 2 have defended their thesis, and the third is in the process of defending.

Professor Bekyarova is a member of 3 editorial boards, she has 5 reviews of scientific articles and projects, and 6 participations in the scientific jury.

Scientific activity

Professor Bekyarova has registered participation in 12 international forums and 38 presentations in national scientific congresses with international participation. The total impact factor of Professor Bekyarova from publications and resumes is $IF = 26,254$. This data confirms her outstanding research interests.

Educational and teaching activities

Professor Bekyarova is the author and co-author of 9 textbooks and teaching manuals. These are guides for medical students, dentists, and college students covering important topics in the field of general and clinical pathophysiology – basic theoretical

statements, practical guides, clinical tasks, pathophysiology of the pain, exam tests, and more.

Professor Bekyarova has a rich teaching experience as an assistant, teacher, lecturer, which makes her a desirable teacher and leader of the educational process. She has delivered a full series of lectures on pathophysiology to medical and dental students, as well as to students in college programs for nurse, midwife, rehabilitator, and pharmacist assistant. At lectures and seminars, professor Bekyarova always connects the theoretical with the clinical practice, she has the constant communication with the clinical specialties and research units in the clinics of Medical University of Varna.

Professor Bekyarova is also the author of 8 educational programs in pathophysiology for different specialties.

Professor Bekyarova participates in 2 projects of the Fund "Science" of the Medical University of Varna - project RU 051PO001-3.06-0028 (Increasing scientific potential and career opportunities in the field of medicine, healthcare and biotechnology) and project RU 051PO001-3-3.07-0002 (Student practice).

Professor Bekyarova is a proven and successful physician, professor, teacher, and scientist with important contributions in the fields of modern pathophysiology, medicine, and medical pedagogy.

Professor Bekyarova enjoys a high reputation among her colleagues, students and employees. He is well known and appreciated in the medical academic community of our country and abroad, as well as among pathophysiology teachers here.

From our joint work at the Medical University of Varna, I know professor Bekyarova as an excellent and respected teacher, a conscientious researcher and scientist with an original creative handwriting.

Professor Bekyarova is a member of the Bulgarian Union of Physicians, a member of Bulgarian Physiological Society, European Physiological Society and Union of Scientists.

Conclusion

Professor Dr. Ganka Yordanova Bekyarova, MD is a well-established and prominent doctor-teacher, an outstanding professor and a modern Bulgarian scientist with a high scientific publication activity, with scientific and practical contributions in many areas of medicine and pathophysiology. She is a successful lecturer and teacher, a proven leader of research projects and graduate students, and the author of several textbooks, manuals, and research programs. According to the certificate on the minimum national requirements for a "professor", the law and regulations, Prof. Bekyarova performs all groups of indicators-A, B, D, G and E, and is 100% and more than 100% (respectively – 100%, 100%, 850%, 1750% and 151%).

Upon a detailed examination of her whole activities, it is clear that the professor Bekyarova goes beyond the basic requirements for acquisition a position "professor" in

accordance with the Law on the development of Academic Staff in the Republic of Bulgaria, the rules of its application and the regulations on the conditions and procedure for the acquisition of scientific degrees and the occupation of academic positions at the University "Prof. Dr. Asen Zlatarov", Burgas. Given her rich research background, her extensive teaching experience, publication and research activities, and the contributions of the candidate, I propose to reappoint the academic position of "Professor" to Professor Dr. Ganka Yordanova Bekyarova, MD.

17.03.2021

Professor Dr. Iskra

PhD.