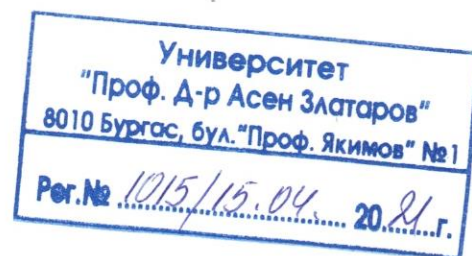


To the Chairman of the Scientific Jury
University "Prof. Dr. Asen Zlatarov" - Burgas,
under a procedure for holding an academic position
"Professor" of Pathophysiology at the Faculty of Medicine
at the University "Prof. Dr. Asen Zlatarov" - Burgas
with candidates: Prof. Dr. Ganka Yordanova Bekyarova, MD, PhD



STATEMENT

From Prof. Dr. Blagoi Ivanov Marinov, MD, PhD
Vice Rector of Science and Research,
Medical University of Plovdiv

Subject: Competition for the academic position "**PROFESSOR**" in the field of higher education 7. "Health and Sports" in professional field 7.1 "Medicine" and scientific specialty "Pathophysiology" for the needs of the Medical Faculty of the University "Prof. Dr. Asen Zlatarov" - Burgas and published in the State Gazette № 105/2020.

In the announced competition the only candidate is **Prof. Dr. Ganka Yordanova Bekyarova, MD, PhD**. She has submitted for the competition procedure all the necessary materials, references and documents in accordance with the regulatory requirements.

I declare that I have no conflict of interest, including co-authorship in the candidate's publications.

1. Short biographical reference, creative and professional path.

Prof. Dr. Ganka Yordanova Bekyarova, MD was born on July 24, 1952 in Kotel. In 1977 he graduated with honors in Medicine at the Medical Academy - Sofia. Since 1980 she has been appointed an assistant at the Department of Pathophysiology at the Higher Medical Institute - Varna. In 1984 he acquired the specialty "Pathophysiology". In 1984 she was promoted to senior assistant professor, and in 1989 - to chief assistant professor. In 1990 she defended her dissertation on the topic: "Changes in the functional properties of erythrocytes associated with free radical oxidation in thermal trauma" in the scientific specialty

Pathophysiology. In 1999 she acquired the academic position of Associate Professor of Pathophysiology. In 2014 he defended a dissertation on DMSc on the topic: "Study of some possible mechanisms of liver damage associated with oxidative stress in the conditions of experimental thermal trauma and the role of melatonin in hepatoprotection." In 2016 she was elected professor of pathophysiology at MU-Varna. Since 2000 she has been the head of the Educational and Scientific Sector of Pathophysiology at the Department of Physiology and Pathophysiology of MU-Varna. Prof. Ganka Bekyarova is a respected member of the medical society and a member of many professional societies and organizations, including:

- Union of Scientists in Varna
- Bulgarian Society of Physiological Sciences
- European Society of Physiology (FEPS)
- Bulgarian Medical Union

She is a member of the editorial boards of the journals: Journal of Biomedical & Clinical Research, Oxidants and Antioxidants in Medical Science and Scientific Journal. Prof. Bekyarova shows consistent development in her scientific and professional growth. She also has communicative and organizational qualities, which she applies in her teaching activity. Fluent in written and spoken English and Russian. Prof. Bekyarova has a strong interest in the application of modern teaching methods in medical education (participation in the project "Interactive teaching methods", №BG051P0001-3.1.09.0013).

2. Research activity

Overall description of the submitted and papers accepted for review.

Prof. Bekyarova participates in the announced competition for professor of "Pathophysiology" at the University "Prof. Dr. Asen Zlatarov" - Burgas with 73 publications and 50 reports. There are a total of 12 participations with separate chapters in textbooks and teaching aids for students. A separate monograph on the topic: "Endothelial dysfunction, vascular oxidative stress and cardiovascular risk: pathophysiological mechanisms and clinical application" (Varna, 2015). The total impact factor of publications (IF = 10.87) and abstracts (IF = 15.39) is 26.25.

The distribution of publications is as follows:

- Articles in journals with impact factor - 13
- Articles in refereed foreign and Bulgarian magazines - 65
- Articles in scientific journals - 8
- Monograph - 1
- Chapters from textbooks - 12

Prof. Bekyarova is the first author in 31 scientific articles. She presents in the current competition and participation in congresses, symposia and conferences with published abstracts - a total of 62 titles, of which 22 at international forums.

Prof. Bekyarova has led or participated in a number of research and educational projects. She was the scientific supervisor of three doctoral students, two of whom defended their PhD theses. She has been repeatedly elected a member of scientific juries for academic positions and scientific degrees, a reviewer of articles in Bulgarian and foreign journals, as well as a reviewer of research projects. These data show that Prof. Bekyarova can work both independently and as a leader and team member.

Significance of the papers

Prof. Bekyarova's publications are in significant **international** journals, including: *International Journal of Immunopathology and Pharmacology*, *Biotechnology & Biotechnological Equipment*, *Methods Finding Experimental and Clinical Pharmacology*, *Burns* and **national** publications, including: *Scripta Scientifica Medica*, *Medical Review*, *Military Medicine*, etc.

Description by topic and contributions

Thematically, the scientific works of Prof. Ganka Bekyarova are in the field of competition and address extremely topical and important issues, mainly in the field of endothelial dysfunction, oxidative stress, metabolic syndrome and cellular molecular mechanisms of liver damage, divided into the following areas:

- oxidative stress in an experimental model of thermal trauma
- oxidative stress and low-grade inflammation and their role in apoptosis in steatotic liver

- the effect of melatonin on NF-kB and its modulating effect on the inflammatory response and apoptosis
- early markers of endothelial dysfunction and expression of transcription (Nrf2 and NF-kB) factors and the enzyme chemo-oxygenase-1 in tissues

Prof. Bekyarova's professional path and scientific output show her upward development as a researcher, which is supported by documented references to her publications - numbering 240 citations. The Hirsch index (h-index, Google Scholar) is 11.

3. Scientific contributions

The overall research and teaching activity of Prof. Bekyarova contains significant contributions of theoretical and practical nature, namely:

- The role of oxidative stress for endothelial dysfunction in diseases with increased cardiometabolic risk such as diabetes, obesity, hypertension and obstructive sleep apnea has been established
- Modeling of pathobiochemical and pathophysiological mechanisms of thermal injury induced by thermal trauma
- For the first time, melatonin has been shown to increase the expression of the transcription factor Nrf2, the activity of chemo-oxygenase-1 and the natural antioxidant defense and to limit the oxidative damage and apoptosis of hepatocytes in experimental thermal trauma.
- The anti-inflammatory, antioxidant and anti-apoptotic effects of melatonin have been proven
- Transcription factors such as Nrf2 and NF-kB give a more reliable and global picture of the pathophysiological mechanisms of tissue damage compared to studying only individual markers of oxidative stress, inflammation and apoptosis.
- The key role of oxidative stress and low-grade inflammation for progressive liver damage in nonalcoholic fatty liver disease has been established

4. Evaluation of the teaching activity

Prof. Ganka Bekyarova has many years of teaching experience (over 40 years) and is an established teacher in the discipline of pathological physiology. In its development it passes

successively from assistant professor to full professor at MU - Varna. She reads lectures and performs practical classes with third year students in the discipline of pathophysiology (in Bulgarian and English) in medicine, dentistry, pharmacy and specialties in medical college and the Faculty of Public Health. She has developed curricula and lecture courses in the taught disciplines, implementing modern approaches in the teaching of pathophysiology. She has worked actively with student groups, with whom she has joint publications and participation in scientific forums.

6. Conclusion

The analysis of the scientific and research activity and teaching activity of the candidate gives me grounds to conclude that Prof. Ganka Bekyarova is an established scientist and academic lecturer with extensive practice and professional experience. Her overall professional activity has significant contributions of theoretical and practical nature in the field of competition. The scientific production, creative activity and teaching activity of Prof. Bekyarova fully correspond to the sciencemetric indicators contained in ZRASRB, its Regulations and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions at the University "Prof. Dr. Asen Zlatarov" - Burgas. I strongly recommend to the esteemed Scientific Jury to award Prof. Ganka Bekyarova, MD, PhD the title "PROFESSOR" for the needs of the University "Prof. Dr. Asen Zlatarov" - Burgas.

April 12, 2021

Author of the Statement:

Prof. Dr. Blagoi Marinov, MD, PhD