

## STATEMENT

by Prof. Dr. Zornitsa Zlatarova, PhD, DSc

Medical University Varna

appointed by Order of the Rector of MU-Varna No. P109-139/23.02.2023

**Regarding:** Announced competition for the academic position "Associate Professor" in the field of higher education 7. "Health and sports", professional direction 7.1. "Medicine", in the scientific specialty "Ocular diseases" for the needs of the Department of "Ocular diseases and visual sciences" ", Faculty of Medicine, according to the announcement in

SG No. 102/23.12.2022

Dr. Mladena Nikolaeva Radeva, PhD, is the only candidate for the announced competition. Documents specified in the regulations for the terms and conditions for acquiring scientific degrees and occupying academic positions at the Medical University - Varna have been submitted.

### **Brief biographical data:**

Dr. Mladena Nikolaeva Radeva graduated in medicine from the Medical University of Varna in 2015. From 2015 to 2019, she was a specialist in ophthalmology at SBOBAL-Varna and MU-Varna, and in 2020. acquires the specialty "Eye Diseases". In the period 2018/2021, she is a full-time doctoral student at the Department of Eye Diseases and Visual Sciences, MU-Varna, and in 2021 acquires the National Academy of Sciences "doctor" in medicine, after defending a dissertation on the topic "Possibilities for microstructural analysis and assessment of damage to the anterior ocular surface from ultraviolet rays of natural and artificial origin". In 2018 Dr. Radeva started working as an assistant in the Department of Eye Diseases and Visual Sciences, MU-Varna, and in 2021. becomes chief assistant. In 2020, Dr. Radeva obtained a master's degree in "Health Management and Medico-Social Care", Medical University - Varna.

Dr. Radeva speaks English and Spanish. She participated in a number of national and international scientific conferences, such as during the XVII Symposium of the Bulgarian Glaucoma Society, March 22-23, 2019, Plovdiv, she was awarded the "Young Scientist of BGS" award, and in 2022 during the Achievements and Perspectives conference in

ophthalmology, BOS October 28-30, 2022, Borovets - with an award named after Prof. Dabov. In 2019 Dr. Radeva received the "Specialist doctor whom we trust" certificate from the "24 Hours" initiative, and in 2021 - an EBO Diploma.

Evaluation of scientometric indicators in connection with participation in a competition for the academic position of "associate professor"

### **I. Research activity:**

The total publication activity of Dr. Mladena Radeva contains 29 scientific papers. To participate in the competition, she submitted:

- Dissertation work for the acquisition of the PhD on the topic "Possibilities for microstructural analysis and assessment of damage to the anterior ocular surface from ultraviolet rays of natural and artificial origin", 2021.
- Monograph - Meibomian glands - norm and pathology, 2022.
- Full-text publications in scientific journals and anthologies other than those for the acquisition of PhD - 21 (of which 5 in foreign scientific publications referenced and indexed in world-famous databases with scientific information/WOS/Scopus/, 16 in non-refereed journals with scientific review , of which 3 are foreign)
- Full-text publications in scientific journals and collections in connection with the acquisition of the PhD - 3, of which 1 in foreign scientific publications referenced and indexed in world-famous databases with scientific information/WOS/Scopus/
- Full-text publications in scientific journals and anthologies beyond the minimum scientometric requirements for tenure of Academic Position "Associate Professor" - 3

The total number of points from indicators G5-9 is 220, which cover the mandatory minimum of 200 points.

Dr. Radeva has participated with a report in a total of 14 national and international scientific conferences.

In 2022, a monographic work by Dr. Radeva was published: "Meibomian glands - norm and pathology", reviewed by Art. cor. Prof. Dr. Christina Grupcheva, Ph.D, DSc and Assoc. Prof. Vesela Ivancheva, Ph.D. The monograph is written on 231 pages and is very well illustrated

with tables and figures. Contains 5 chapters: 1) Anatomy and physiology; 2) Meibomian Gland Dysfunction (MGD); 3) Diagnosis of meibomian glands; 4) Influence of internal and external factors; 5) Management and therapy of meibomian gland dysfunction. The monograph provides a more detailed look at the meibomian glands (MGs), the pathophysiology and diagnostic methods of MGD, delving into practical options for the control of this increasingly prevalent condition. The relationship between MGD and dry eye disease (DED) is analyzed, various methods of evaluating eye function are discussed, clinical signs of dysfunction are described in detail, various types of meibographic techniques are described, and the influence of environmental factors on function is described of the glands. The final chapter describes the various approaches and methods for treating MGD, including expression of the meibomian glands, therapeutic heating, intense pulsed light therapy, moisturizers, etc., and the prospects for medical and surgical treatment of this problem are also discussed. The monograph can be considered both a scholarly work and a useful practical guide for clinicians in the treatment of meibomian gland dysfunction.

According to the submitted reference from the library of the University of Varna, 5 citations of Dr. Radeva's scientific works were searched for in foreign scientific publications referenced and indexed in world-famous databases with scientific information /WOS/Scopus/.

The indicated citations for indicators D10-12 carry a total of 75 points, with a minimum requirement of 50 points.

Dr. Radeva's scientific research activities and contributions of scientific works are in the following main directions:

1. Study of the effect of ultraviolet light on the eye analyzer. (D7.1, D7.4, D7.5, D8.4, D8.7)
2. Microstructural analysis of the ocular surface. (D7.2, D7.3)
3. Diagnosis and treatment of glaucoma. (G8.2, G8.5, G8.15)
4. Children's vision - prevention and prophylaxis. (D8.6, D8.9, D8.12)
5. Study of the meibomian glands as part of the ocular surface. (monographic work, D8.13, D8.16)

The main contributions of Dr. Radeva's scientific works are the following:

- For the first time in Bulgarian literature, a monograph dedicated to the function and diagnosis of the meibomian glands and the possibilities for their therapeutic influence is published
- For the first time in the world literature, a microstructural analysis of the changes of the eye surface under the influence of ultraviolet rays of natural and artificial origin has been published.
- A link between health habits and those for eye sun protection, and the microstructural changes of the eye surface caused by the action of ultraviolet rays has been proven.
- Confocal microscopy has been confirmed as a method for detecting changes at the cellular level in the absence of a biomicroscopic finding.
- For the first time in the literature, mucin globules have been shown to affect the corneal surface, which includes disintegration of the epithelium and activation of keratocytes, by means of IVLSCM.
- For the first time in the world literature, a microstructural analysis of the Kayser-Fleischer annulus in patients with Wilson's disease was performed and described by IVLSCM.

Dr. Radeva participated in 8 projects financed by MU-Varna, of which he is the head of two and one national project.

## **II. Educational activity:**

According to the provided reference, the teaching experience of Dr. Radeva as of January 2023. is 4 years, 9 months, 23 days. She is a teacher at the Department of Ophthalmology and Vision Sciences of the Medical University of Varna, participating in the education of Bulgarian and English-speaking students of medicine and dentistry, students of the specialty "Nurse", "Midwife" and "Medical Optician", doctors -specialists, and in thematic courses, as the academic employment is as follows: - during the academic year 2019/2020, the total employment is 295 hours; - in the academic year 2020/2021, the total employment is 362 hours; - in the academic year 2021/2022, the total employment is 448 hours. It is noteworthy that the study load of Dr. Radeva significantly exceeds the required 220 hours. for the positions she held.

### **III. Therapeutic and diagnostic activity**

Dr. Radeva actively participates in the medical-diagnostic and advisory work at SBOBAL-Varna, as well as in various screening programs. Her main clinical interests are related to diseases of the anterior ocular surface and glaucoma. As a young and ambitious clinician, she is constantly working to expand her knowledge and enrich her surgical skills.

I have known Dr. Radeva since the beginning of her specialization at SBOBAL-Varna and my impressions of her are excellent. She is a responsible young ophthalmologist with a continuous drive for development and improvement, knows how to work in a team and has a marked interest in scientific work.

### **Conclusion**

The scientometric indicators presented by Dr. Mladena Radeva, PhD, as well as the study load reference, meet the criteria laid down in the Law of Development of Academic Staff in Republic of Bulgaria and the Regulations for the conditions and procedures for acquiring scientific degrees and holding academic positions at the Medical University-Varna, as a requirement for holding the academic position of "associate professor". This gives me the reason to give my positive vote and to recommend to the respected Scientific Jury to award Dr. Mladena Nikolaeva Radeva, PhD., the occupation of the academic position of "associate professor".

10.05.2023

Varna

Prof. Dr. Zornitsa Zlatarova, PhD, DSc



