

OPINION

by Assoc. Prof. Rositsa Hristova Chamova, MD, PhD

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Regarding: /SUBJECT: competition for the academic position of "ASSOCIATE PROFESSOR", a field of higher education 7. Healthcare and sport, a professional field 7.1. Medicine, scientific specialty/subject "Hygiene" (including occupational, communal, school, radiational, etc.) at the Hygiene and Epidemiology Department, Faculty of Public Health, Medical University - Varna.

I. GENERAL PRESENTATION OF THE PROCEDURE

Based on Art. 4, paragraph 1 and paragraph 2 of the Law for the Development of the Academic Staff in the Republic of Bulgaria (LDASRB) and art. 57, paragraph 1 and paragraph 2 of the Regulations for the Development of the Academic Staff of the Medical University - Varna and a decision of the Faculty Council at the Faculty of Public Health (Protocol № 235 / 27.11.24) with Order № P-109-443/05.12.24 of the Rector of the Medical University - Varna I have been appointed to present an opinion in connection with a competition for the academic position of "ASSOCIATE PROFESSOR" in the field of higher education 7. Healthcare and Sport, a professional field 7.1. Medicine, scientific specialty "Hygiene" (including occupational, communal, school, radiation, etc.), Hygiene and Epidemiology Department, Faculty of Public Health, Medical University - Varna.

In the promulgated competition for the position of an associate professor in SG issue № 85/08.10.2024, the only candidate is Chief Assistant Professor Albena Borisova Toneva - Stoyanova, MD, PhD, working with the same department.

Albena Borisova Toneva - Stoyanova, MD, has submitted all necessary documents in compliance with the requirements of the Law for Development of the Academic Staff of the Republic of Bulgaria and the Regulations for Development of the Academic Staff of MU-Varna for participation in the announced competition.

II. PROFESSIONAL DEVELOPMENT OF THE CANDIDATE

Albena Borisova Toneva - Stoyanova, MD was born on August 27, 1964 in the town of Russe. She graduated in 1989 at the Medical University - Varna. From 1989 to 2000, she worked as a physician – medical officer at the Hygiene and Epidemiology Inspectorate (HEI) – Varna. Between 2000 and 2006, she headed the "TSC" sector and was the head of the "KHOH" department at the Regional Inspectorate for Public Health Protection and Control (RIKOZ) – Varna. From 2006 to 2011, she served as Director of the "Health Control" Directorate at the Regional Health Inspectorate (RZI) – Varna. Between 2011 and 2014, she was the head of the "Food Control" department at the Regional Directorate for Food Safety (ODBH) – Varna. From 2014 to 2021, she worked as a physician in the Immunohematology Laboratory at the Regional Center for Transfusion Hematology (RCTH) – Varna. Since 2021, she has been a physician at the Outpatient Medical Care Unit of the National Center for Infectious and Parasitic Diseases (NPCVEH) at the Military Medical Academy (VMA) – Sofia

and a member of the Nosocomial Infections Commission at the University Multiprofile Hospital for Active Treatment (MBAL) – Varna.

Since 2015, Dr. Toneva has successively held the positions of Assistant Professor and Chief Ass. Prof. in the Department of Hygiene and Epidemiology at the Faculty of Public Health, Medical University – Varna.

In 2019, she defended her doctoral thesis on the topic "Nutritional Status of Children with Neuropsychiatric Disorders and Its Relationship with the Quality of Life of Parents and Caregivers", obtaining the educational and scientific degree of Doctor.

In 2003, Dr. Albena Toneva acquired a specialty in "Nutrition and Dietetics."

A review of Dr. Toneva's credentials confirms that she has met the minimum national requirements (MNR) under Article 2b, Paragraph 5 of the Academic Staff Development Act (ZRASRB) for holding the academic position of Associate Professor, as evidenced by the table presented below (Table 1).

Table 1. Information on compliance with the minimum national requirements

Group of indicators	Contents	ASSOCIATE PROFESSOR (number of points)	Points of Rositsa Chamova, MD
A	Indicator 1	50	50
B	Indicators 3 or 4	100	100
C	Sum of indicators from 5 to 9	200	215.57
D	Sum of indicators from 10 to 12	50	60

III. SCIENTIFIC ACTIVITY

1. Publication activity (full-text publications)

The publishing activity of Dr. Toneva is presented by a total of **53** scientific papers, **1** dissertation, and **1** monograph.

For the purpose of this competition, Dr. Toneva has submitted as an evidence **20** full-text scientific papers in her report on the implementation of the minimum requirements for taking the academic position "Associate Professor", according to LDASRB. Of these, **9** are published in foreign and Bulgarian journals that are referenced and indexed in **Scopus and Web of Science**, while **11** are in non-referenced journals with scientific peer review and in edited collections. All publications are co-authored, with first authorship in three publications.

In addition, two more publications are included, apart from the evidence for fulfillment of the minimum requirements for holding the academic position of "Associate Professor".

2. Citations

The total number of citations with which Dr. Toneva participates in this competition is **five**, of which **three** citation is in a referred and indexed journals in world-famous databases with scientific information (Scopus and Web of Science), **one** in a monograph and collective volumes and **one** in non-referred journals.

3. Main scientific contributions

Dr. Toneva's authorial review indicates that a significant portion of her scientific contributions are innovative and have practical applications. Her research work focuses on the investigation of nutrition, growth, and neuropsychological development in children with neuropsychiatric disorders and those from atopic families, cow's milk protein allergy (CMPA) in infants, the quality of life of parents and caregivers of children with neurological impairments, nutrition during pregnancy and breastfeeding and its connection to childhood nervous system development, official control over the production, trade, labeling, and consumer awareness of organic foods, and hospital-acquired infections and the opinions of healthcare staff and patients regarding hospital safety and hygiene. Her scientific work is focused on several areas:

- **Nutrition, Nutritional Status, and Neuropsychological Development in Children**
- **Oral Health Status in Children**
- **Allergic Diseases in Children**
- **Nutrition During Pregnancy and Breastfeeding**
- **Quality of Life**
- **Organic Foods and Official Food Control**
- **Hospital-Acquired Infections**

I accept the scientific contributions outlined in Dr. Toneva's authorial review, with the doctoral dissertation and monograph holding a leading position. For the first time in Bulgaria, the nutritional status of children with neuropsychiatric disorders has been examined using biochemical markers, anthropometric indicators, and indices according to the standards and criteria of the World Health Organization (WHO) and the American Society for Parenteral and Enteral Nutrition (ASPEN). The relationship between nutritional status and oral health in these children, as well as the nutritional challenges and problems they face, has also been studied. The findings confirm a high prevalence of malnutrition and macro- and micronutrient deficiencies among children with neuropsychiatric impairments.

A significant original scientific contribution is the high frequency of vitamin D deficiency in children with neurological impairments in Bulgaria and its role in neuropsychological development. The study analyzes both nutritional and non-nutritional factors influencing the nutritional status of children with neuropsychiatric disorders. Approaches for supporting the nutrition of children with cognitive and motor impairments have been discussed.

For the first time in Bulgaria, the link between malnutrition in children with neuropsychiatric disorders and the condition of the oral mucosa has been investigated. A direct relationship has been identified between inflamed, painful oral mucosa and malnutrition in children.

A recommendation has been formulated for the implementation of preventive programs aimed at ensuring the optimal health of children's masticatory apparatus from the intrauterine period until the full development of all anatomical structures and physiological processes.

Scientific Contributions in "Food Allergies in Infancy" analyzed risk factors for the development of food allergies in infancy, including maternal nutrition and lifestyle (e.g., smoking), term vs. preterm birth, delivery method, and family atopic history. Nutritional, health, and socio-demographic factors influencing the development of children with a family history of allergies in early childhood were examined. Childhood food allergies and the importance of early diagnosis in preventing severe complications of cow's milk protein allergy (CMPA) were investigated. The relationship between infant feeding models (exclusive breastfeeding, mixed feeding, formula feeding) and CMPA was evaluated. Breastfeeding practices in children with an atopic history and assessed neuropsychological development using the DP-3 validated questionnaire were studied, and finding that the strongest predictor of higher overall child development scores was the absence of atopic dermatitis.

Scientific Contributions in "Healthy Nutrition During Pregnancy and Breastfeeding" The impact of maternal nutrition, alcohol consumption, medication use, and smoking on neurogenesis and neurodevelopment was examined. The critical role of maternal nutrition during pregnancy in ensuring normal neurodevelopment in children was highlighted. Deficiency of key nutrients such as folic acid, vitamin D, long-chain polyunsaturated fatty acids, iron, and others, which are essential for proper brain development was discussed.

Scientific Contributions in "Organic Foods" and "Official Food Control". Aspects of official food control in the production, trade, and labeling of organic products in Northeastern Bulgaria, as well as the responsible institutions and regulatory procedures were presented. The demographic and socio-economic characteristics of organic food consumers in Dobrich region, identifying that the consumer profile (with a predominance of women) is linked to gender, were examined. The results of official food control and consumer awareness of organic products in Dobrich region, which influence consumer perceptions and purchasing decisions were analyzed. The potential of the NOVA food classification system, which categorizes products based on their level of processing, to support and enhance existing dietary recommendations for the prevention of socially significant diseases was reviewed.

Scientific Contributions in "Quality of Life of Parents and Caregivers of Children with Neuropsychiatric Disorders". This was the first study in Bulgaria assessing the quality of life of parents and caregivers of children with neuropsychiatric disorders, using the WHOQOL-BREF-26 questionnaire developed by the World Health Organization (WHO). The impact of socio-demographic factors, child diagnosis, nutritional status, and feeding characteristics on the quality of life of caregivers in family and non-family settings was analyzed. A positive correlation between feeding difficulties and lower quality of life was identified.

Scientific Contributions in "Hospital Hygiene and Nosocomial Infections". A retrospective analysis of the structure of healthcare-associated infections at MBAL – Varna, part of the

Military Medical Academy (VMA) – Sofia, over a 10-year period, discussing the most commonly isolated pathogens in intensive care units – *S. aureus*, *Pseudomonas spp.*, and *Escherichia coli* was conducted. The opinions of patients and healthcare staff on hospital safety at MBAL – Varna, VMA – Sofia were examined and compared. The analysis of results provides valuable insights that could be used to improve existing practices or introduce new models for ensuring patient safety.

IV. SCIENTIFIC ACTIVITY

1. Participation in scientific forums

The scientific activity of Dr. Toneva is impressive, which is evident from the attached list containing **62** participation in scientific forums with **33** posters.

2. Participation in scientific-research projects

Dr. Toneva has participated in 4 scientific-research projects.

3. Work with Residents and Students

Dr. Toneva has supervised six residents specializing in "Nutrition and Dietetics." Together with them, as well as with medical students, she has participated in national and international scientific forums and has co-authored scientific publications.

V. TEACHING ACTIVITY

Dr. Toneva began her teaching career at Medical University – Varna in September 2015. From 2019 to 2024, her average annual teaching workload was 363 hours.

She has conducted practical training in Hygiene and Ecology for students in Medicine, Dental Technology, and Rehabilitation. Additionally, she has led lectures and practical sessions in the following subjects: Environmental Health, Environment, Nutrition, and Health, Hygiene and Ecology of Healthcare Facilities, Hygiene of Medical Institutions and Nosocomial Infections, Nutrition Hygiene, Nutrition in Children with Swallowing Disorders, Food Safety and Food Legislation, Community Hygiene, Hygiene of Childhood and Adolescence, Modern Concepts in Healthcare Facility Design. These courses are part of the master's and bachelor's programs at Medical University – Varna.

Dr. Toneva has also supervised one graduate student in their diploma thesis.

In view of the above-stated, I consider that Dr. Albena Toneva is a fully qualified lecturer in the specialty "Hygiene" with extensive professional experience and high general medical, specialized and foreign language qualifications.

CONCLUSION

Based on the materials presented for participation in the competition, I can say that Chief Ass. Prof. Albena Toneva, MD, PhD possesses scientific achievements, teaching experience and professional competence, which meet the requirements for taking the academic position of "ASSOCIATE PROFESSOR", according to LDASRB and the Regulations for the development of the academic staff at MU-Varna.

Therefore, I confidently give my positive assessment and offer to the members of the esteemed Scientific Jury to award the academic position "ASSOCIATE PROFESSOR" to Dr.

Albena Borisova Toneva - Stoyanova, MD, PhD in the scientific specialty "Hygiene" (including occupational, communal, children and adolescents', radiation, etc.) at the Hygiene and Epidemiology Department, Faculty of Public Health at the Medical University - Varna.

Заличено на основание чл. 5,
§1, б. „В“ от Регламент (ЕС)
2016/679

With respect:.....

14. 02.2025

Varna

Assoc. Prof. Dr. Rositsa Hristova Chamova, MD PhD

