### STATEMENT

### by Prof. Dr. Rumen Petrov Konstantinov, PhD

epidemiology, Member of the Scientific Jury under Order No.R-109-260/23.06.2022 of Prof. Dr. Valentin Ignatov, PhD, Rector of the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna

Regarding: Announced competition for taking up an academic position **Professor** in the specialty "Hygiene (incl. occupational, communal, school, radiation, etc.)" (Bulgarian and English language training), professional field of higher education 7. Healthcare and sport - one for the needs of the Training Sector "Hygiene", Department of Hygiene and Epidemiology, Faculty of Public Health, Medical University Varna, announced in SG issue 32/26.04.2022

In this competition, documents were submitted for participation by one candidate - Assoc. Prof. Dr. Darina Naydenova Hristova, PhD. The applicant has submitted the documents required under the Law on the Development of the Academic Staff in the Republic of Bulgaria. Bulgaria and the Regulations for Development of the Academic Staff of MU-Varna documents corresponding to the necessary qualitative and quantitative criteria for holding the academic position of "Professor".

# I.Characteristic of the research and teaching activities of the applicant.

## 1. Brief biographical data and career development.

Assoc. Prof. Dr. Darina Naydenova Hristova was born on 02.04.1975 in the town of Providadia. Graduated from MU-Varna in 2000. She works as a doctor at IHS "FR. Joliot-Curie" and senior expert at NIHW-Varna, and since 2003 in MU-Varna. Since 2003 she has successively goes through academic positions -assistant, senior and chief assistant at the Department of Hygiene, Medical University-Varna. In 2015 she was habilitated as Associate Professor, specialty Hygiene in the Department of Preclinical and Clinical Sciences, Organization and Economics of Pharmacy, Hygiene and Epidemiology, Medical University - Varna. Since 2020 she has been Head of the Hygiene sector at the Department of Hygiene and Epidemiology, Medical University – Varna.

Assoc. Prof. Dr. Darina Hristova has a specialty in Nutrition and Dietetics. In 2015 she obtained the scientific and educational degree "Doctor" with the topic of the PhD thesis "Nutritional behavior, anthropometric indicators, physical activity and physical ability in underweight, normal and overweight girls". Language communication skills (English and Russian languages) make it possible to perform a wide range of teaching, scientific, educational tasks and activities. Participates as a reviewer in scientific journals and collections: Journal of IMAB, Journal of Biomedical and Clinical Research (JBCR), Scientific Publications of the Union of Scientists - Varna, series Medicine and Ecology, Collections of Reports from International Interdisciplinary Meetings "Alumni Club and Friends", Medical University-Varna, 2020, 2021.

The continuing active academic and applied development through participation in numerous courses and specializations in nutrition, metabolic health, breastfeeding and healthy nutrition of pregnant and breastfeeding women, principles and techniques for changing the nutritional behavior in consultations of patients on healthy and dietary nutrition, support for breastfeeding, training in "Nutrigenomics: Genetic Testing for Personalized Nutrition" at Dietitians of Canada and becoming part of the first certified team in nutrigenomics in Bulgaria, etc. This rich list of training and certified modules testifies to the active professional development of Associate

Professor Naydenova, an experience she actively applies in her teaching and professional activities at the Medical University – Varna.

# 2. Submitted materials for the competition.

The list of scientific works of Assoc. Prof. Dr. Darina Naydenova Hristova includes 25 titles (1 of which is a monograph (habilitation thesis) published in editions that are referenced and indexed in world-renowned databases with scientific information, as required by the Law on the Development of Academic Staff in the Republic of Bulgaria. Bulgaria and the Regulations for Development of the Academic Staff of MU-Varna.

Publications and reports published in scientific journals, referenced and indexed in world-renowned databases of scientific information – 6; Publications and reports published in non-referenced journals with scientific review or published in edited collective volumes – 9; Full text publications in scientific journals and collections outside the minimum scientific requirements for occupation of AD "Professor" – 9; Citations reflecting the scientific activity of the applicant – 12. (Academic reference for the publications, citations and scientific profiles of Assoc. Prof. Dr. Darina Naydenova Hristova, PhD, Department of Hygiene and Epidemiology, Faculty of Public Health, Medical University-Varna, prepared in the Library of the Medical University-Varna). A total of 25 scientific publications to be reviewed and evaluated in this competition are presented after the competition for the academic position of Associate Professor (2015).

According to the provided documentary official scientific, educational and teaching information, the applicant meets the requirements under the Law on the Development of the Academic Staff in the Republic of Bulgaria. Bulgaria and the Regulations for Development of the Academic Staff of MU-Varna qualitative and quantitative criteria for holding the academic position of "Professor".

### 3. Innovation and Research

The scientific works of Assoc. Prof. Dr. Darina Naydenova Hristova have been published in authoritative and peer-reviewed scientific journals - Folia Medica, European Journal of Public Health, Journal of IMAB, Journal of Biomedical and Clinical Research, as well as in scientific publications published in reputable Bulgarian editions and edited collective volumes - Medinfo, Chronicles BATHS., Symposium "Alumni Club and Friends" - Medical University Varna, Proceedings of the Bulgarian Society of Nutrition and Dietetics, The Science of Nutrition in the Prevention and Treatment of Contemporary Diseases, Sofia: Science Pulmoloria, Varna Medical Forum, Notices of the Union of Scientists - Varna, series Medicine and Ecology, Varna Medical Forum, Bulgarian journal of public health, Practical pediatrics, etc.

Assoc. Prof. Dr. Darina Naydenova Hristova is the main author of the presented publications and reports. Actively participates in the implementation of many international and national research projects on food and clinical problems with valuable applied results. The scientific activity is expressed in numerous contributions as author and rapporteur of international and national scientific forums, where 96 scientific reports have been delivered in various scientific areas from the candidate's professional portfolio.

Assoc. Prof. Dr. Darina Naydenova Hristova is the official scientific manager of 2 PhD students who have defended their dissertations and 6 in the process of developing their dissertation in doctoral programs in "Hygiene", as well as the manager of 12 graduates from the Master's degree programs FMG, OKOZ, RMUS. Professional and scientific competence and the ability to work with doctoral students and graduates allow active assistance and creation of conditions for academic and professional growth, participation in training and international forums, creation of appropriate conditions and opportunities for work and development. Proof of the successful scientific and educational process is the successful defense of the dissertation and thesis works and

the overall scientific and professional development of the colleagues.

### 4. Main contributions to scientific work:

The contributions of the scientific works of Assoc. Prof. Dr. Darina Naydenova Hristova can be grouped into the following main scientific chapters:

- Presented monograph paper "Eating disorders. Aspects of the clinical practice of the nutrition and dietetics doctor. Varna: Ed. MU-Varna; 2022. 160 p. ISBN: 978-619-221, 363-3.', is a systematic author's study of the risk factors, clinic, diagnosis and therapy of some of themostsignificant current eating disorders. The main etiological factors included the environment, nutrition, genome, microbiome, metabolic, endocrine and immune systems, brain were studied. The main eating disorders are systematically presented and analyzed: Anorexia nervosa; Bulimia nervosa; Binge eating; Orthorexia; Bigorexia. The author carries out a comprehensive and in-depth analysis of the available literature and provides valuable recommendations for the prevention, diagnosis and treatment of eating disorders. The book includes 10 cases of different types of eating disorders from the author's clinical practice. They outline algorithms for solving real, concrete diagnostic and therapeutic tasks.
- I. Eating disorders and alternative eating patterns (C 3, D 7.3, D 8.3)
- II. Vitamin D in the genesis of obesity and its role as an epigenetic factor (D 7.1, D 8.1)
- III. Recommendations for feeding in maternity and early childhood
  - Nutritional intake of n-3 fatty acids in pregnant and lactating women (during maternity)
    (D, 7.2)
  - 2. Micronutrient status, reproductive problems and foetal programming of metabolic disorders

(D8.2, Suppl. 4)

3. Breastfeeding practices

(Suppl. 9)

4. Vitamin B12 status in nursing and early childhood (Suppl.2)

IV. Food allergies in infancy

(D 7.5, D 8.5, D 8.8)

- V. Nutrition, nutritional status and physical activity in adolescents
  - 1. Nutritional behaviour, anthropometric parameters, dental status and physical activity in adolescents in 12th grade

(A 1, D 7.6)

- 2. Physical activity and nutritional status in adolescents with adolescent idiopathic scoliosis (Suppl. (1) (Suppl. (3) (Suppl. 7)
- 3. Effect of choreography on fatigue and school success in primary students (D7.4)

# VI. Functional foods and beverages

- Coffee as a functional drink used in overtime and night shift in fatigue prevention (D 8.6, Suppl. 5)
- 2. Coffee consumption for workers in conditions of noise and vibration (Suppl. 8)
- 3. Antioxidant composition of raspberry fruit juice (Rubus idaeus)
- VII. Nutrition, health risk and food culture among consumers
  - 1. Biological hazards in food (D 8.7)
  - 2. Food supplements and informed consumer choice

(D 8.4, D 8.9)

The scientific output of the applicant covers a wide profile of scientific and scientific-applied areas related to nutritional behaviour. Different age groups were studied and analysed on the importance of diet and behaviour. Results with significant scientific and applied value are shown. The peculiarities of food infections of epidemiological importance have also been studied. Scientific contributions are evidence of the broad professional competence and scientific interests of the applicant and the results obtained have a certain contribution to make to medical science.

### 5. Assessment of the teaching activity of the applicant

Assoc. Prof. Dr. Darina Naydenova Hristova has a total of over 17 years of pedagogical experience, of which 7 years is an associate professor at the Medical University - Varna. The high professional qualification in "Nutrition and Dietetics" and scientific interests in the field of hygiene and prevention are realized in the teaching of complex and specific subjects in the field of hygiene and ecology. She trains students, trainees and graduates from the Faculty of Public Health, the Faculty of Medicine, the Faculty of Dental Medicine, the Faculty of Pharmacy and the specialties from the Medical College, with an average workload in the last years of over 337 hours at the normative 160 hours (210% workload from the normative for workload). The spectrum of academic disciplines in the teaching palette of Assoc. Darina Naydenova Hristova includes: hygiene and ecology-Bulgarian language training, medicine, hygiene and ecology, pharmacy, hygiene and epidemiology, dental medicine, current problems of nutrition of the healthy and sick person for masters in medicine, Elective discipline "nutrition and socially significant diseases" for students in dental medicine, Elective discipline "socially significant health problems and diseases related to nutrition" for students public health inspector, Elective discipline "current problems of nutrition of the healthy and sick person" for students in speciality "Health management", environment and health, Masters "Public health" in Russian language, Hygiene and ecology -Master program in health management in Russian language, environment, nutrition and health-Masters "Health management", nutrition and dietetics- Masters "Rehabilitation, wellness and spa", food safety. Food legislation - Master's degree programme in Food Safety, Nutrition Hygiene I and II part - Bachelors-IPH, Pharmaco-medical Aspects of Nutrition, Masters FMG, Nutrition and Dietetics, Medical Cosmetics, Nutrition and Health, Health Management Bachelor, Nutrition and Health, Speech Therapy, Hygiene and Ecology, Assistant Pharmacist, Hygiene and Ecology, Dental Technician, Hygiene and Ecology, Rehabilitation, Hygiene and Ecology, Nursing, Hygiene and Ecology, X-ray Laboratory, Hygiene and Ecology – under the program Health Assistant, Specialization Nutrition and Dietetics basic course IV part: Nutrition and Health Risk. Nutrition therapy.

Assoc. Prof. Naydenova is the Chairman of the state examination committee for the acquisition of the medical specialty "Nutrition and Dietetics" (2020, 2021). Shi is the author of a program, manager and lecturer (2 lectures) on the postgraduate training program "(PTP) "Eating disorders – a problem of the 21st century. Opportunities for response and therapy, 2019, lecturer at PTP "Support for breastfeeding", 2019, lecturer at PTP "Nutrition during the first 1000 days", attendance and e-learning, 2019-2020

In the implementation of the learning process he appears as an active organizer and manager, skillfully applying modern methodology in the learning activity. She actively participates in the initiation and drafting of new curricula and the constant updating of existing curricula and tests for students in medicine, dentistry, health management, protection and control of public health, etc.

Assoc. Prof. Darina Naydenova Hristova is an inspiration, organizer and participant in many educational programs and projects: "Green Light for Breastfeeding", funded by Varna Municipality, "Health Today and Tomorrow – Voluntary Youth Information Campaign" with the partnership of MU-Varna, ASMB-Varna and funded by Varna Municipality. Participation in a three-year project of the Karin Dom Foundation on "Early intervention to prevent the abandonment of children with disabilities", a six-month project "Healthy eating - an element of young people's lives", funded by Varna Municipality, a six-month project of INNER WHEEL CLUB VARNA EUROPEA "Forward to EXPO Milan, Health and Food for Happiness: Teaching the Young People of Varna to Cook Healthy Food", co-financed by Varna Municipality, "Biodynamic Agriculture for the Creation of Functional and Healthy Cereals", funded by the Agricultural Academy (2016-2017), Head of a scientific project, approved by KENNY in the Eastern Bulgaria region" (2018-2020), a scientific project, approved by KENNY in the Medical University of Varna on "Nutritional Status and Physical Activity in Life on the Development of Cardiovascular Diseases", a project, approved by KENNY in the Medical University of Varna – Idiopathic Adolescence Scoliosis in the City of Varna" (2018-2020), "Alternative Nutrition Patterns in Girls from Greece". Varna - prevalence and risk factors" "Research on the influence of diet and lifestyle on the development of cardiovascular diseases in the region of Eastern Bulgaria" "Express method for research on the relationship between optical properties and antioxidant effect of extracts of medicinal plants and drinks from traditional fruits"," Micronutrient status of pregnant women", "Control of trade in biologically produced agricultural products and foods in Northeastern Bulgaria" (2020 so far)," Micronutrient supplementation in patients with type II diabetes on metformin treatment " (2020 so far), "Effectiveness of low histamine diet in patients with irritable bowel syndrome "," Nutritional allergies of the breastfeeding age in Pleven region risk factors and behavior "(2018-2019)," Student practices" project funded by "Human Resources Development" and the European Social Fund. Academic mentor to students from the Medical University - Varna. He is a member of the Bulgarian Medical Union, National Association "Support for Breastfeeding", "Bulgarian Society of Nutrition and Dietetics", "National Committee

on Breastfeeding", Bulgarian Society of Public Health (BSNH), European Society of Public Health (EUPH), Vice-President of "Alumni Club at MU-Varna".

### Critical remarks

I have no critical comments on the candidate.

# I.Personal impressions

Our joint work as members of the academic staff of the Department of Hygiene and Epidemiology gives me the reason to certify that Assoc. Prof. Dr. Darina Naydenova Hristova is an experienced lecturer, scientist and colleague with high professionalism, wide scientific interests, expressed collegiality and organizational skills.

### **II.Conclusion**

Assoc. Prof. Dr. Darina Naydenova Hristova is a respected member of the academic community of the Medical University in Varna. She is an erudite specialist, an experienced lecturer and a serious researcher with considerable professional and pedagogical experience. The scientific, teaching and organizational work of Assoc.Prof. Dr. Darina Naydenova Hristova fully meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria. Bulgaria and the Regulations for Development of the Academic Staff of MU-Varna for Academic Promotion.

As a member of the Scientific Jury, I support her candidacy for the academic position of **Professor** of the scientific specialty "**Hygiene (incl.** occupational, communal, school, radiation, etc.)" at the Department of Hygiene and Epidemiology, Faculty of Health, Medical University - Varna and I confidently give my positive vote.

City of Varna 10.08.2022

MEMBER OF the SCIENTIFIC JURY:

(Rumen Konstantinov, MD, PhD)