REVIEW

From

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Subject: competition for the academic position "Professor" in the scientific specialty "Hygiene (incl. labor, communal, school, radiation, etc.)" in the field of higher education 7. Health and sports, professional field 7.1. Medicine, at the Faculty of Public Health, Department of Hygiene and Epidemiology, Management Board of Hygiene, according to an announcement published in the State Gazette, issue 61 / 23.07.2021

By order № P-109-391 / 20.09.2021 of the Rector of the Medical University - Varna, decision of FC (Minutes 70170 / 10.09.2021) and minutes № 1 / 01.10.2021 of a meeting of the scientific jury, I have been appointed to prepare a review of a competitive procedure for holding the academic position of "Professor" in the scientific specialty "Hygiene (including occupation, community, school, radiation, etc.)" in the field of higher education. 7. Health and sports, professional direction 7.1. Medicine, at the Faculty of Public Health, Department of Hygiene and Epidemiology, Management Board of Hygiene.

The only candidate in the competition is Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, MD.

1. Brief biographical data and career development of the candidate.

Dr. Ruzha Zlatanova Pancheva-Dimitrova graduated in Medicine at the Medical University - Varna in 1997.

Her professional development began in 1997 and until 1998 she was a medical doctor at the Clinic "Pediatrics"-MHAT "St. Marina". During the period 1999-2002 Dr. Pancheva-Dimitrova was a medical doctor at the Polyclinic "Ayladanovi", and from 2002 to 2004. works as a doctor in AMCSMP "Vidia". From 2007 to 2012 Dr. Pancheva-Dimitrova is a medical doctor in the Multidisciplinary Clinic of Pediatrics, University Hospital "St. Marina", and then in 2013 until now he is a pediatrician at AMCSMP "St. Stilian". According to the information provided, the total work experience of Dr. Pancheva-Dimitrova is 19 years and 6 months.

Assoc. Prof. Dr. Pancheva-Dimitrova, MD has two medical specialties, since 2003 with a degree in Pediatrics and since 2017 with a degree in Nutrition and Dietetics.

Academic development of Dr. Pancheva-Dimitrova began in 2003 and until 2008 she was a full-time PhD student at the Department of Pediatrics, specialty pediatrics MU-Varna. In 2008, after defending a thesis on "Probiotics in the prevention of dyspepsia in hospitalized children aged 0-7 years" a scientific and educational doctor's degree was conferred "PhD" in the scientific specialty "Pediatrics". During the period 2012 - 2013 Dr. Pancheva-Dimitrova, PhD was an assistant at the Department of Hygiene, MU-Varna, from 2013 to 2014 he was a senior assistant at the Department of Hygiene MU-Varna, and from 2014. Until now he is an Associate Professor at the Department of Hygiene and Epidemiology - MU-Varna.

Assoc. Prof. Dr. Pancheva-Dimitrova, PhD is a member of the Bulgarian Medical Union, the Association of Cell Biology, the Bulgarian Pediatric Association, the Bulgarian Society of Enteral and Parenteral Nutrition, the National Breastfeeding Support Association, the European Society of Clinical Nutrition and Metabolism, the European Society of Pediatric

Gastroenterology, Hepatology and Nutrition, the Academy of Breastfeeding Medicine. She is Deputy Chairman of the Bulgarian Society of Pediatric Gastroenterology, Hepatology and Nutrition, and a member of the Management Board of the Karin Dom Foundation.

Assoc. Prof. Dr. Pancheva-Dimitrova, PhD has a very good language training and speaks English, German and Russian.

2. General description of the presented materials and fulfillment of the scientometric criteria.

Assoc. Prof. Dr. Pancheva-Dimitrova, PhD has presented a total of 41 scientific papers with the relevant abstracts - 18 scientific publications that are referenced and indexed in world-famous databases of scientific information, 10 publications published in non-peer-reviewed journals with scientific review or published in edited collective volumes; 4 pcs. published in a university textbook; 9 full-text publications in Bulgarian scientific journals.

The provided ACADEMIC REFERENCE for the publications, citations and scientific profiles of Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, PhD, Department of Hygiene and Epidemiology, Faculty of Public Health, Medical University-Varna, prepared from the Library of MU-Varna based on information provided by the applicant and the automated information from international scientific databases, in accordance with the Regulations for application of the law for the development of the academic staff in the Republic of Bulgaria and the Regulations for the development of the academic staff of the Medical University - Varna certifies that publications, citations and scientific work, the candidate's profiles correspond to the minimum scientometric requirements for holding a "Professor".

The academic reference certifies 100.02 p (with a mandatory minimum of 100 p) of 10 scientific publications in publications that are referenced and indexed in world-famous databases of scientific information; 222 p (with a mandatory minimum of 200 p) of 8 scientific publications in publications that are referenced and indexed in world-famous databases of scientific information and 10 Publications and reports published in non-refereed journals with scientific review or published in edited collective volumes; 555 p (with a mandatory minimum of 100 p) of 37 Citation, reflecting the scientific activity of the candidate; 253.56 p for (with a mandatory minimum of 100 for indicators E13-E22, related to the management of successfully defended doctoral students; acquired medical specialties; participation in a national and international research project; published university textbook or textbook, which is used in the school network; training of interns, postgraduates and doctoral students (seminars and practical classes).

The publications of the candidate in magazines with Impact Factor are 5 from the last years with a Total Impact Factor - 16,018. In the habilitation procedure for "Associate Professor" Dr. Pancheva-Dimitrova presented 3 other publications with a Total Impact Factor: 27,710

The publications submitted by the candidate for participation in the competition, such as number, citations, scientific profiles and categories, fully comply with the recommended quantitative scientometric criteria for holding AD "Professor", defined in the Regulations for the development of the academic staff at the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna.

3. Qualitative evaluation of research and contributions.

In the presented scientific production of Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, MD scientific papers and results of research work are divided into 7 thematic research areas, including 10 subfields: I. Nutritional status, nutritional and non-nutritional factors, care and quality of life of children with neuropsychiatric diseases; II. Parental hesitation to vaccinate; III. Recommendations for nutrition in chronic diseases beginning in childhood - Cystic fibrosis (CF), Nutrition in chronic intestinal diseases (CHD), Nutrition in type 1 diabetes mellitus with a long history and metabolic risk; IV. Preventive effect of nutrition - Preventive effect of breast milk, Prevention of allergies in childhood, Gastro-oesophageal reflux in infancy - nutritional interventions; B. Metabolic and nutritional risks in chronic conditions and diseases with long-term therapy - Metabolic risks in patients after chemotherapy. Eating and taste disorders in patients with chronic renal failure. Nutritional deficiencies in patients with complete dentures. Non-alcoholic liver disease. VI. Probiotic effect; VII. Training of medical students in the field of hygiene and ecology.

The scientific contributions of Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, PhD in the individual thematic areas can be outlined as follows:

I. <u>Nutritional status, nutritional and non-nutritional factors, care and quality of life of children with neuropsychiatric disorders</u>

Scientific contributions- the nutritional status (CS) of children with neuropsychiatric diseases (NCDs) in Northeastern Bulgaria was studied and assessed using biomarkers and anthropometric indicators; the differences in the assessment of cholesterol and malnutrition are compared according to the standards and criteria for assessment of growth in healthy children; the degree of malnutrition among children with neuropsychiatric disorders was assessed and deficiencies of macro- and micronutrients were found; the oral status and its deviations in children with NSAIDs and its influence on eating difficulties were studied; the quality of life (QL) of parents and caring children with NPD was assessed and its connection with the nutritional status and nutrition of children with disabilities was studied; the factors of nutritional and non-nutritional nature, which influence cholesterol in children with NPD, were studied; neurotrophins have been studied in detail in the context of autism spectrum disorders; The opportunities for online education of families of children with disabilities in the period of social isolation due to the pandemic COVID-19 were assessed.

Scientific-applied and confirmatory contributions: a recommendation has been formulated for conducting prophylactic programs, ensuring the optimal health of the children's chewing apparatus; recommendations have been made for regular monitoring and assessment of the nutritional and oral status of children with NSAIDs; recommendations have been made to the responsible institutions to take measures aimed at supporting children with NPI and the whole care environment; confirmed: literature data on the widespread prevalence of malnutrition among children with neurological disabilities; data from other studies on the degree of malnutrition among children with NSAIDs and on the established deficiencies of macro- and micronutrients; data from other studies on the status of oral status and its impact on the initial stage of digestion and on cholesterol in children with NSAIDs; recommendations were made for: assessment of CS in connection with HS by areas of parents and carers with NPH; for care of children with NPZ in the conditions of COVID-connected isolation.

II. Parental hesitation to vaccinate

Scientific contributions: A thorough review of the current state of parents' attitudes around the world to immunizations in general has been made; Large-scale studies have been conducted - representative for Bulgaria and in a comparative aspect with other European countries on the attitude of parents to immunizations; The sources of information, the attitudes, the fears of the parents towards the immunizations are revealed; The factors influencing the decision of the parents to immunize their children have been identified and

assessed; The attitude of the families of children and personal physicians to the recommended vaccinations was studied.

Scientific and applied contributions: The readiness of parents to vaccinate their children if the vaccines become recommended is analyzed; Proposals and recommendations have been formulated to the responsible institutions for raising awareness regarding the vaccination program; The established levels and patterns are the basis for improving the condition of immunization coverage; The data are the reason for not accepting a proposal to discuss the recommendation of the immunization program in our country.

III. Nutrition recommendations for chronic diseases beginning in childhood

1. Cystic fibrosis (CF)

Scientific contributions: Participation in the development of updated guidelines on the care of infants, children and adults with CF; Review of the medical literature on the epidemiology, pathophysiology, prevention and treatment of CF-related malnutrition; Establishing the importance of nutritional status for growth retardation and development, and in children and adults with CF, as well as its negative impact on lung function; Gather scientific evidence for a link between good nutritional status and better lung function.

Scientific and applied contributions: recommendations for the care of infants and children with CF; adaptation of European recommendations for monitoring and assessment of nutritional status in patients with CF.

2. Nutrition in chronic intestinal diseases (CHD)

Scientific contributions: Establishing the need for dietary nutrition; about assessment of the relationship between nutrition and HCV: nutritional support for malnourished patients, use of exclusively enteral nutrition as the main therapy, the role of specific nutrients as a risk factor for the development of the disease; scientific substantiation of approaches in differentiation of chronic intestinal conditions.

Scientific and applied contributions: Adaptation of European dietary recommendations for CHD; Paying special attention to the nutrition and diet of children with CHD; A thorough differential diagnosis has been made of conditions in which inflammatory bowel disease in childhood is gaining ground.

IV. Preventive effect of nutrition

1. Preventive effect of breast milk

Scientific contributions: Breastfeeding practices among children with urinary tract infections up to three years of age were evaluated; It has been established that urinary tract infections in infancy and early childhood develop against the background of predominantly predominant, mixed and substitute nutrition; Evidence has been shown that breastfeeding does not have a significant protective effect on urinary tract infections in children under three years of age. Exclusive breastfeeding has a protective effect on the development of urinary tract infections in infants and young children; The data on the importance of breastfeeding duration and IC for the recurrence of IPA are summarized.

Scientific and applied contributions: Results were evaluated for the importance of breastfeeding duration and IC as significant protective factors in terms of the severity of IPA in children up to three years of age; It has been argued that longer breastfeeding and exclusive breastfeeding contribute to protection against development and reduce the severity of PPIs in infants and young children.

2. Prevention of allergies in childhood.

Scientific contributions: The main recommendations for nutrition of future and current mothers in order to prevent allergies are outlined; Data from the scientific literature on the recommendations for exclusive breastfeeding for at least the first 4-6 months of life as

prevention of allergies and for artificial feeding of infants from atopic families have been synthesized; Attention is paid to feeding practices and the lack of evidence of the need for delayed introduction of potentially allergenic foods after the 5th month, regardless of atopic heredity.

Scientific and applied contributions: The preventive effect of some probiotics on the risk of allergy to cow's milk protein in infants has been evaluated; The evidence in the medical literature about the importance of food interventions - prebiotics, probiotics, vit. D and polyunsaturated fatty acids (PUFAs) to prevent allergies in childhood.

3. Gastroesophageal reflux in infancy - nutritional interventions

Scientific contributions: The effect of locust beans in infant milk on infants with gastroesophageal reflux disease (GER) has been studied; Evidence has been collected on the effectiveness of locust bean glue (especially galactomannan) in reducing some indices to monitor pH, increase body weight and tolerability; Summary are data in the scientific literature on prevention and nutritional steps for the treatment of GER / GERD

Scientific and applied contributions: Clinical thinking is aimed at relieving symptoms, maintaining normal growth, preventing complications and minimizing the adverse effects of GER on infant development; Attention is paid to dietary measures in the therapeutic possibilities in early childhood; The need for the use of milk thickeners for the treatment of children with GER / GERD is justified.

4. Nutrition in type 1 diabetes mellitus with a long history and metabolic risk

Scientific contributions: The eating habits of patients with long-standing type 1 diabetes mellitus (T1HD) have been identified; The food intake and the frequency of consumption of various food products in patients with long-standing T1ZD were assessed; The significance of strict adherence to dietary and behavioral guidelines as an important component of modern treatment of type 1 diabetes mellitus; The importance of training for proper eating behavior and improving glycemic control is justified.

<u>V. Metabolic and nutritional risks in chronic conditions and diseases with long-term</u> therapy

1. Metabolic risks in patients after chemotherapy

Scientific contributions: Variable metabolic risk factors have been identified in patients undergoing therapy for malignant haemopathies; The importance of metabolic risk factors among survivors of acute lymphoblastic leukemia (ALL) therapy was assessed.

Scientific and applied contributions: Recommendations for nutrition and physical activity have been made; The long-term cardiovascular risk in patients with ALL was assessed; Recommendations for early identification and management of risk factors have been developed.

2. Eating and taste disorders in patients with chronic renal failure

Scientific and applied contributions: Taste disturbance was assessed in patients with chronic kidney disease (CKD); Relationships have been found between the duration of treatment, age and loss of taste and the sensation of a metallic taste in the mouth.

3. Nutritional deficiencies in patients with full dentures

Scientific contributions: Analysis of energy intake and macronutrients in patients with complete dentures; Adverse dietary abnormalities have been identified, which contribute to the worsening of comorbid conditions.

Scientific and applied contributions: Recommendations for regular evaluation of the nutrition of patients with full dentures; Attention is paid to the effect of diet on comorbid conditions; Recommendations for early identification and management of eating disorders.

4. Non-alcoholic liver disease

Scientific contributions: Data on the significance of non-alcoholic liver disease in childhood are summarized; The non-specific significance of the clinical picture and the specificity of the biochemical parameters are emphasized.

Scientific and applied contributions: The need for targeted search of the triad of clinical-biological markers for non-alcoholic steatohepatitis is substantiated; The data for the main directions for the treatment of the disease are synthesized; The conditions for the slow disease progression to cirrhosis and its complications are defined.

VI. Probiotic effect

Scientific contributions: Data on clinical manifestation and severity of different types of dyspepsia in hospitalized children were analyzed; Evidence of a significant difference in the frequency and severity of dyspeptic complaints in children, prophylactic and non-prophylactic with probiotics, is presented; Data on the frequency of various etiological causes of dyspepsia in children and the prophylactic effect of some probiotics were analyzed; A positive effect of probiotic use in children with previous use of broad-spectrum antibiotics has been proven; The term "psychobiotic" has been introduced in the Bulgarian scientific literature; The effect of psychobiotics and their potential on cognition, memory, learning and behavior is presented.

Scientific-applied and methodological contributions: There is a significant difference in the effect of probiotic prophylaxis in infants on natural and artificial nutrition; Some clinical features of moderate and severe oral and gastrointestinal mucositis in children with malignancies have been analyzed; A stimulating effect of probiotic prophylaxis on the synthesis of gastrointestinal IgA has been established. A change in the level of TNF-alpha and IL-10 in the feces of children in the course of chemotherapy has been established.

VII. Training of medical students in the field of hygiene and ecology

Scientific and applied contributions: Collections and notebooks with tasks and tests have been created in support of medical students studying the discipline "Hygiene and Ecology".

Teaching activity

From the academic reference with reg. № 099-2204 / 09.08.2021 it can be seen that Assoc. Prof. Dr. Pancheva-Dimitrova, PhD began his teaching career in 2012 and has a teaching experience of 09 and a half years in the department " Hygiene ", later the Department of Hygiene and Epidemiology at the Medical University of Varna.

At the Medical University of Varna, Dr. Pancheva-Dimitrova, PhD, supervises classes in various disciplines: Pediatrics - English language training for bachelors - speech therapy; Hygiene and ecology - Bulgarian and English language training; Environment and Health - Masters - Masters Public Health - Cyprus and Bulgaria; Environment, Nutrition and Health - Masters, Health Management - Masters; Nutrition and dietetics - masters - Rehabilitation, wellness and spa; Food safety - master's program OKOZ; Hygiene of children and adolescents - bachelors-IOP; Breastfeeding support - SID - masters of medicine - BEO, AEO; Current problems of nutrition of healthy and sick people - AIDS for masters of medicine.

Assoc. Prof. Dr. Pancheva-Dimitrova, PhD is an organizer and lecturer in the following courses for postgraduate training (SDO): Lecturer in Module 3 for specialists in Nutrition and Dietetics; Breastfeeding support; Characteristics of autism. Diagnosis. Therapeutic methods and approaches in childhood; Early childhood intervention, face-to-face and e-learning; Meals during the first 1000 days - face-to-face and e-learning; Nutrition of children with type 1 diabetes mellitus.

Assoc. Prof. Dr. Pancheva-Dimitrova, PhD is the supervisor of two doctoral students who successfully defended in 2019 and 2020; supervisor of 4 graduates from the master's program "Public Health" - Cyprus; 2 from the master's program "Health Management" class 2015, 2016 and 7 from the master's program OKOZ - class 2017-2021.

Assoc. Prof. Pancheva is the organizer and participant in a series of training, information activities and initiatives - Lecturer for the magazine "9 months" at the "School for parents" on the topic: "Breastfeeding - practical advice", "Academy for parents" Founder of the breastfeeding school in Varna at the National Association "Breastfeeding Support" Associate of the Karin Dom Foundation in the field of early childhood development and early intervention, as well as when working with children with special needs Lecturer and correspondent for educational sites: www.dechko.bg and www .namama.bg Consultant for the creation of an educational film on "Puberty" funded by Glaxo Smith Kline, approved by the Ministry of Health as an educational film aimed at school age Lecturer for UNICEF-Bulgaria on the project "Creating centers for maternal and child health" in Shumen and Sliven

CONCLUSION

The submitted documents confirm the rich experience, productive scientific and research work, professional competence and teaching experience of Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, PhD.

The analysis of the overall research, clinical, publishing and teaching activities of Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, PhD gives me reason to claim that they fully comply with quantitative scientometric criteria for holding the academic position "Professor", defined in Regulations for the development of the academic staff at the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna and the Law on the Development of Academic Staff in the Republic of Bulgaria.

Based on the above, I express a POSITIVE assessment and strongly recommend the esteemed Scientific Jury to vote "FOR" the academic position of "Professor" in the scientific specialty "Hygiene (including occupation, community, school, radiation, etc.)" in the field of higher education. education 7. Healthcare and sports, professional field 7.1. Medicine, at the Faculty of Public Health, Department of Hygiene and Epidemiology, Management Board of Hygiene by Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, PhD.

October 20, 2021

Prof. Dr. Veselka Duleva, MD: