SCIENTIFIC REVIEW

on participation in a competition for the academic title of "Professor"
by professional field 7.1 Medicine,
scientific specialty "Hygiene (including labor, communal, school, radiation, etc.)",
announced in D.V. no. 61 /23.07.2021.
for the needs of the Faculty of Public Health, Department of Hygiene and Epidemiology at the

One candidate appears at the competition –

Medical University of Varna

Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, MD, PhD

Reviewer: Prof. Dr. Teodora Todorova Dimitrova, MD, PhD - Deputy Dean Educational activity, PHC, MU "Prof. Dr. Paraskev Stoyanov" Varna Member of the NJ according to an order of the Rector of MU - Varna № 109-391 / 20.09.2021.

The necessary documents, prepared by the candidate, are in compliance with the requirements of the Law for the development of the academic staff in the Republic of Bulgaria (ZRASRB) and the Regulations for its application in MU-Varna. The deadline for submitting the documents has been met.

Biographical data and career development of Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, MD, PhD:

Year of birth: 15.11.1972

Education: Secondary education - First Language High School - Varna (1991); Higher education - Medical University - Varna (1991 - 1997).

Professional path: resident in the Clinic of Pediatrics of the University Hospital "St. Marina"; doctor in outpatient care, resident in the Multidisciplinary Clinic of Pediatrics.

Full-time doctoral student at the Department of Pediatrics (2003-2008). Assistant (2012) and Chief Assistant (2013) in the Department of Hygiene and Epidemiology, MU - Varna since 2014.

Current place of work: Associate Professor of Hygiene in the Department of Hygiene and Epidemiology and pediatrician at AMCSMP "St. Stilian"

Specialties: specialty in Pediatrics - 2003 and in Nutrition and Dietetics since 2017. Specializations: Two-week course in abdominal ultrasound, Department of Gastroenterology,

Hepatology, and Nutrition, Medical University, Varna; European Summer School of Pediatric Gastroenterology organized by the European Society of Pediatric Gastroenterology,

Hepatology and Nutrition for several consecutive years; One-week training for young doctoral students and researchers organized by the European Society of Pediatric Gastroenterology, Hepatology and Nutrition, Munich, Germany; One-week course for modern breastfeeding

support organized by the National Breastfeeding Committee Basic course in Enteral and parenteral nutrition, organized by the European Society of

Clinical Nutrition in Dubrovnik, Croatia
Three-day training in Support of children with cystic fibrosis - Southampton Great Britain
Pediatric Gastroenterology Course - Salzburg, Austria, funded by the Austrian-American

Foundation

Additional SDO specializations:

SDO in Child Nutrition at Boston University, Practical training in compiling a healthy menu for children organized by NCPHP, A series of 5 modular pieces of training in nutrition and dietetics at NCPHP, Sofia, Two-month practical training in clinical nutrition and dietetics at ISUL "Queen Ioanna", Sofia.

Scientific degree: Protected scientific-educational degree "Doctor" on the topic: "Probiotics in the prevention of dyspepsia in hospitalized children aged 0-7 years" (2008) Membership in professional and scientific organizations: 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 Breastfeeding Clinical Nutrition and Metabolism, European Society of Pediatric Gastroenterology, Hepatology and Nutrition, Academy of Breastfeeding Medicine, Board of Directors of Karin Dom Foundation and Deputy Chairman of the Bulgarian Society of Pediatric Gastroenterology, Hepatology and Nutrition.

Evaluation of quantitative and qualitative scientific indicators:

In the current competition for a professor, Assoc. Prof. Ruzha Pancheva is presented with the equivalent of a habilitation thesis of 10 full-text publications in publications that are referenced and indexed in world-famous databases with scientific information and 27 scientific papers, of which:

- 1. Full-text publications in scientific journals referenced and indexed in world-famous databases with scientific information 5 in: Journal of IMAB, Horm Res Paediatr, Giornale italiano di nefrologia, World journal of clinical pediatrics, Biomedical Reviews;
- 2. Full-text publications in collections of reports from scientific forums in Bulgaria 4 in: Proceedings of the Jubilee Scientific Conference with International Participation, Faculty of Public Health, Pleven (2), Nutrition and Development: Papers from the Fourth Multifaceted Conference on Child Development, Journal of the Union of Scientists-Varna Medicine and Ecology Series;
- 3. Full-text publications in journals 15 in: International Journal of Biomedical and Advance Research, Practical Pediatrics (5), Medinfo (3), Science Endocrinology, Pulmonology and Pediatrics (2), Scripta Scientifica Salutis Publicae, Varna Medical Forum, Medical;
- 4. Published abstracts of reports from scientific forums abroad in a magazine with impact factor 3 in: Frontiers in Pediatrics (3).

Of the actual publications in magazines, collections and monographs, Assoc. Prof. Pancheva is the first / independent / author in 9 / 24.3% / articles; second author in 11 / 29.7% / articles and third and consecutive author in 17 / 45.9% / articles.

Research and applied research activities of the candidate:

The main scientific topics in the publications of Assoc. Prof. Dr. Pancheva are related to nutrition and dietetics in childhood and parental attitudes to vaccination. In the personal reference attached to the documents for the competition for the contribution nature of the works of Assoc. Prof. Dr. Pancheva is formulated 88 main scientific-practical contributions of her works, distributed by scientific fields and as such with scientific character and scientific contributions with scientific-applied and methodological nature, which I fully support:

Direction 1. Nutritional status, nutritional and non-nutritional factors, care, and quality of life of children with neuropsychiatric diseases. The nutritional and oral status of children with neuropsychiatric disorders was studied and assessed using biomarkers and anthropometric indicators according to the standards and criteria of the WHO (2006,2007) and the American Organization for Parenteral and Enteral Nutrition (AOPEH 2015). A recommendation has been formulated for conducting prophylactic programs, ensuring the optimal health of the child's masticatory apparatus from the intrauterine period until the completion of the development of all anatomical structures and physiological processes.

Direction 2. Recommendations for nutrition in chronic diseases beginning in childhood - Participate in a team to develop updated guidelines on the care of infants, children, and adults with cystic fibrosis. European recommendations for monitoring and assessment of nutritional status patients with cystic fibrosis have been - Identifying the need for a diet that would alleviate the condition of children with inflammatory bowel disease. Adaptation of European nutrition recommendations. - The eating habits of patients with long-standing type 1 diabetes mellitus and their connection with deviations in glycemic control have been identified.

Direction 3. Preventive effect of nutrition

- The practices for breastfeeding among children with urinary tract infections up to three years of age in the Varna region, which do not meet the modern recommendations for healthy eating, are evaluated.
- The preventive effect of some probiotics on the risk of allergy to cow's milk protein in infants has been evaluated.
- The effect of locust beans in infant milk on reflux indices and tolerance in infants with gastro-oesophageal reflux has been studied. The need for the use of milk thickeners as a first step for the treatment of children with GER / GERD, which are also the basis for industrial development, is justified.

Direction 4. Metabolic and nutritional risks in chronic conditions and diseases with long-term therapy

- Variable metabolic risk factors have been identified in patients undergoing treatment for malignant haemopathies.
- The importance of metabolic risk factors among survivors after treatment for acute lymphoblastic leukemia was assessed;
- The conditions for slow disease progression to cirrhosis (65-75% of cryptogenic cirrhosis are due to progression of non-alcoholic liver disease) and its complications, including hepatocellular carcinoma, are defined.

Direction 5. Probiotic effect: The concept of "psychobiotics" has been introduced in the Bulgarian scientific literature. The effect of psychobiotics is presented as not only limited in the regulation of neuroimmune axes, but also in diseases of the nervous system. Data on the potential for the application of psychobiotics on cognition, memory, learning and behavior are presented.

Direction 6. Parental hesitation about vaccination: A thorough review of the current state of parents' attitudes towards immunizations in general has been made. The readiness of parents to vaccinate their children is analyzed if the vaccines included in the immunization calendar of Bulgaria become recommended.

Citation:

Assoc. Prof. Pancheva's scientific works are cited 37 times in internationally referenced and indexed in world-famous databases with scientific information. The reference for the citations was prepared based on data from the library of MU-Varna in the databases Web of Science, Scopus, and Google Scholar.

Impact factor:

The total impact factor from the publications of Assoc. Prof. Dr. Ruzha Pancheva in Vaccine, Hormone Research in Pediatrics, Infection Control and Hospital Epidemiology, Journal of Pediatric Gastroenterology and Nutrition and Clinical Nutrition is 16,018. The general impact factor from the publication of articles, incl. the publications presented during the borrowing of AD Associate Professor is 27,710.

Teaching activity:

In the presented certificate for realized study load of the candidate at MU-Varna for the period of the last 4 consecutive years shows the following: 2017/2018 - classroom employment - 282 hours; 2018/2019 - classroom employment - 271 hours; 2019/2020 - classroom employment - 291 hours; 2020/2021 - classroom employment - 253 hours. For the last 4 years, its classroom workload amounts to an average of 274 teaching hours at a standard of 180 lessons. h. (152% workload from the norm for workload) and is completely sufficient for her participation in the current competition.

Participation in projects:

Assoc. Prof. Dr. Pancheva works in the teams of two international projects:

- 2017-2020 Head of the Bulgarian group to the Project on "The effect of Frizolak Gold preventive HA in reducing the risk of allergy to cow's milk protein: Multicenter, placebocontrolled study" funded by Friesland Campina-Netherlands;
- 2019-2021- Research project on "Growth and tolerance of healthy full-term infants fed infant formula with 100% hydrolyzed whey protein or intact milk proteins: Multicenter, randomized, double-blind, placebo-controlled study" funded by Fonterra -operative Group Ltd Australia.

Guide for graduates:

Assoc. Prof. Dr. Dimitrova works individually with graduates from the specialties Protection and Control of Public Health, Health Management, and Public Health, whose work has led to the successful defense of 7 master's theses.

Doctoral students' guide:

Assoc, Prof. Dr. Pancheva is the supervisor of four doctoral students from MU-Varna in the

doctoral program "Hygiene (including labor, communal, school, radiation, etc.)." The result of this research and teaching activity are two successful defenses of the Ph.D.

Management of courses for specialization in postgraduate education: Initiator, organizer, and lecturer of SDO pieces of training with topics: breastfeeding support, characteristics of autism, diagnosis, therapeutic methods and approaches in childhood, early childhood intervention - face-to-face and e-learning, nutrition during the first 1000 days - face-to-face and e-learning, nutrition of children with type 1 diabetes mellitus. Organization and participation of 2 European schools at the European Society of Pediatric Gastroenterology, Hepatology and Nutrition - 2013, 2019.

CONCLUSION

Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, MD, PhD is a doctor and scientist with extensive experience in the field of child nutrition. Contributions are derived from her research-based on long-term material from epidemiological and screening studies among children and patients, vulnerable groups of the population. Its scientific production and the submitted documents meet the requirements of the Regulations for the development of the scientific staff of the Medical University – Varna. This is way I allow myself to give a positive assessment and recommend to the esteemed scientific jury to support the choice of Assoc. Prof. Dr. Ruzha Zlatanova Pancheva-Dimitrova, MD, PhD for "PROFESSOR" in the scientific specialty "Hygiene (including labor, utilities, school, radiation, etc.)" for the needs of the Faculty of Public Health, Department of Hygiene and Epidemiology at the Medical University of Varna.

October 22, 2021

Reviewer:

Varna

(Prof. Dr. Teodora Todorova Dimitrova, MD, PhD)