

OPINION

Subject: Announced competition for the occupation of the academic position **Associate Professor** in the field of higher education, Health and Sport, professional field 7.1 Medicine and scientific specialty Paediatrics for the needs of the **Clinic of Paediatric Surgery** at the University Hospital "N.I. Pirogov" EAD, according to the decision of the Scientific Council with protocol ND-01-2-05/15.01.2025, published in the State Gazette, no. 90/25.10.2024r.

The documents for the above competition were submitted by a **single candidate:** Dr. Denitza Roumenova Kofinova, PhD

The opinion was **prepared by:** Assoc. Prof. Dr. Iren Stoyanova Tzotcheva, PhD, member of the Scientific Jury under the order RD-26-269/29.01.2025 of the Executive Director of the UMHATEM "N.I. Pirogov" EAD.

Professional development of the candidate

Dr. Denitza Kofinova graduated in 2014 from the Medical University - Sofia and acquired the professional qualification "MASTER - DOCTOR". After graduation she started working at the Clinic of Pediatric Gastroenterology of the Hospital "Prof. Dr. Ivan Mitev" - Sofia, successively as a resident physician (2015-2016), specialist in pediatric gastroenterology and specialist in pediatric gastroenterology. He has acquired two specialties. From 2023 until now she has been working as a pediatrician and pediatric gastroenterologist in the Department of Pediatric Abdominal Surgery at the Clinic of Pediatric Surgery of UMHATEM "N. I. Pirogov".

Simultaneously with her clinical activity, Dr. Kofinova also develops an academic one at the Medical University - Sofia, where she is successively Assistant (2016-2018), Assistant Professor (2018) and Senior Assistant Professor (2021) at the Department of Pediatrics. She is a lecturer of medical and dental students in Bulgarian and in English, teaches postgraduate students in paediatrics and paediatric gastroenterology and other paediatric subspecialties. She participates in courses organized by the SDO in Pediatric Gastroenterology and Basic Course - Level I.

Dr. Denitza Kofinova defended her dissertation in 2020 on the topic: "Evaluation of liver fibrosis in children with chronic liver diseases".

Dr. Kofinova is certified in abdominal ultrasonography - level I and II, conventional gastrointestinal endoscopy. She has undergone a course in interventional gastrointestinal endoscopy to perform STRETTA.

She is a member of the European Society of Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN), Bulgarian Society of Paediatric Gastroenterology, Hepatology and Nutrition (BULSPGHAN), Bulgarian Paediatric Association, Bulgarian Association of Ultrasound in Medicine (BAUM), BMA. She is a member of the Board of Directors of BAUM and Deputy Editor-in-Chief of the journal Diagnostic and Therapeutic Ultrasound.

Dr. Kofinova annually participates in national and international scientific congresses and conferences where she presents scientific papers, clinical cases and posters. She is fluent in English (C1), German (C1) and Russian (A2).

Research activity of the candidate

The scientific developments of Dr. Denitza Kofinova are mainly in the field of pediatric gastroenterology, in particular - chronic liver diseases, inflammatory bowel diseases and their impact on nutrition and general health of children.

In the current competition for the academic position of Associate Professor, the candidate submitted 28 publications (27 full-text articles and one published paper), of which 17 were published in scientific journals refereed and indexed in WOS and Scopus and 11 in non-refereed peer-reviewed journals. Four of the publications are book chapters (published in edited collective volumes). Five publications (4 articles and 1 paper) have a Thomson Reuters impact factor (overall IF 9,572 - articles - 5,326, papers - 4,246). In the main part of the publications submitted to the competition the candidate is first or last author - in 16 first author and in one last author (refereed first author - 8 papers, non-refereed with scientific peer review first author - 8 papers).

An official citation reference from the Central Medical Library (CML) was submitted, according to which the candidate has 10 citations in SCOPUS (Elsevier) and 10 citations in Web of Science (Clarivate) and 23 citations in Bulgarian sources. Self-citations are excluded.

Main contributions in scientific works

Dr. Kofinova's research is aimed at better understanding of chronic liver disease, inflammatory bowel disease and *Helicobacter pylori* infection in children. Thanks to the skillful combination of clinical experience and scientific research, the author contributes not only to the development of medical science, but also to the improvement of diagnosis and treatment of children.

Chronic liver diseases

Chronic liver diseases in childhood are an extremely heterogeneous group, whose diagnosis and staging until recently necessarily involved liver biopsy with histological interpretation. Dr. Kofinova is focusing her efforts on developing non-invasive methods to replace this unpleasant and risky approach for children. For the first time in Bulgaria, she applied Shear-wave elastography (2D-SWE) to assess liver fibrosis in children. This method allows a painless and quick diagnosis, and she was able to establish specific values that differentiate the different degrees of fibrosis. This helps to adequately refer children for further investigations or treatment without resorting to biopsy. Dr Kofinova is also investigating genetic factors that may contribute to the development of liver disease in children. For the first time in Bulgaria, she has analysed the genetic polymorphisms PNPLA3, TM6SF2 and GCKR, which play a role in the development of non-alcoholic fatty liver disease (NAFLD). Such studies are a bridge to personalized medicine.

Paediatric inflammatory bowel diseases

Paediatric inflammatory bowel disease (PIBD) - Crohn's disease (CD), Ulcerative colitis (UC) and Nondeterminant colitis, are immune-mediated conditions that have long been considered primarily an adult problem, but are actually affecting more and more children. Dr. Kofinova devotes a significant part of her scientific work to these diseases, analyzing their clinical course in Bulgarian children. She has found that Bulgarian children with Crohn's disease and ulcerative colitis suffer from more aggressive forms of the disease than adult patients and has

demonstrated that calprotectin is the best indicator of disease activity, which is of particular importance to clinicians. Dr Kofinova's study is the first in Bulgaria to track the effectiveness of biological therapies (TNF- α inhibitors) in 48 children with inflammatory bowel disease and provides practical guidance on treatment effectiveness and possible side effects.

***Helicobacter pylori* infection**

Dr. Kofinova studied the prevalence of *Helicobacter pylori* infection among Bulgarian children and found that children with a family history of gastroenterological diseases are significantly more at risk. She also investigated the relationship between H. pylori and functional abdominal pain, finding no statistically significant association between them.

General paediatric gastroenterological problems

The publications submitted for the competition address common general pediatric issues such as contemporary approaches and recommendations for infant and toddler feeding, constipation in infancy, and the place of probiotics in pediatric gastroenterology. Issues that concern every general practitioner and paediatrician.

Multidisciplinary case studies

Dr. Kofinova's rare multidisciplinary case studies are valuable guides that broaden the horizons of pediatric clinicians.

Teaching activity of the candidate

For the period 2018 to date, Dr. Kofinova has taught medical and dental students, as well as postgraduate students in pediatrics and pediatric gastroenterology. She imparts not only theoretical knowledge, but also practical experience, and emphasizes the differential diagnostic approach when discussing difficult multidisciplinary cases.

Summary of the candidate's evaluation

Denitsa Kofinova, MD, PhD has the necessary competence and professional qualities to hold the academic position of Associate Professor in the field of Pediatrics.

The submitted materials exceed the minimum number of points required for the academic position of Associate Professor by the Regulations of the University Hospital "N.I. Pirogov - Sofia (Table 1)

Group Indicator	Content	Indicator group Content Required points according to the requirements of the UMHATEM "N.I. Pirogov" EAD – city Sofia	Dr. Kofinova, PhD
A	Indicator 1	50	50
B	Indicator 3 or 4	100	114
C	Indicator 5-9	250	273,54
D	Indicator 10-12	50	265
E	Indicator from 13 till the end	-	80
Total	Indicator A - E	450	782,54
F	IF (refers only to the requirements of the N.I. Pirogov University Hospital)	5	9,572

Table 1 Comparison between the required minimum number of points and the candidate's actual number of points for scientific production

Conclusion

The overall assessment shows that Dr. Denitza Kofinova has extensive research, clinical and teaching experience in the field of pediatrics and pediatric gastroenterology. The presented scientific works and academic transcript, as well as my impressions from our joint work, are the grounds to consider that the candidate fulfils the criteria and scientific-metric indicators defined in the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its Application and the Regulations on the Conditions and Procedure for Acquisition of Scientific Degrees and Holding of AD and Qualitative Criteria for Development of Academic Staff of the University Hospital "N.I. Pirogov"-Sofia, for holding the academic position of "Associate Professor".

In view of the above, I recommend the members of the esteemed scientific jury to vote POSITIVE for the award of the academic position of "Associate Professor" in the scientific specialty "Pediatrics" to Dr. Denitza Roumenova Kofinova, PhD, for a place announced at the Clinic of Pediatric Surgery, Primary Scientific Unit of "Pediatrics" of the University Hospital "N.I. Pirogov", Sofia. She was appointed to the post of Professor of Pediatrics at the University of Sofia.

14.02.2025 Signed:
(Assoc. Dr. Iren Stoyanova Tzotcheva, PhD)