TO
THE CHAIR OF THE SCIENTIFIC JURY,
BY ORDER NO. RD26-2023/18.10.2023
OF THE HEAD OF
UMHATEM "N.I. PIROGOV" LTD

Opinion

Prof. Dr. Tonyo Iliev Schmilev, PhD Specialist in Paediatrics and Pediatric pulmonology Pediatric and medical genetic department Medical Faculty of Medical University, Plovdiv, Bulgaria v. Katunitsa, Sadovo municipality, Plovdiv district "Mitko Palauzav" 21 mob. phone -0898562366

e-mail: t.shmilev@gmil.com

SELECTED AS A MEMBER OF THE SCIENTIFIC JURY, by Order No. RD26-2023/18.10.2023, according to Article 60, paragraph 2 of the Regulations on the Conditions and Procedure for the Acquisition of Scientific Degrees and the Holding of Academic Positions at UMHATEM "N.I. Pirogov" Ltd., with a decision for a Jury of the Departmental Council - Protocol No.01-3/04.10.2023.

Dr Snezhina Mihaylova Lazova, PhD is the only participant in the competition.

GENERAL PRESENTATION OF THE SCIENTIFIC COMPETITION'S PROCEDURE

The competition for the academic position of "Associate Professor" - one position in the field of higher education 7 - "Health and Sport" in the professional field 7.1 - "Medicine" and the scientific speciality "Pediatrics", announced in the State Gazette newspaper issue No. 46/26.05.2023 according to the Law on the Academic Staff Development of Bulgaria Republic, the Rules for its Application, and the Rules for the Terms and Conditions for Acquiring Scientific Degrees and Occupying academic position and Quality Criteria for the Development of the Academic Staff of UMHATEM "N.I. Pirogov"-Sofia.

All tender documents are presented according to the requirements, well organised, in an excellent aesthetic appearance and with the necessary supporting material.

1. CANDIDATE CAREER DEVELOPMENT

Dr. Lazova graduated with medicine master's degree in Sofia (2008). She worked in the Pediatrics Clinic of UMHAT "Tokuda", as a paediatric fellow, then as a paediatrician at Cadiohelp Medical Center, Pediatrics Clinic of UMHAT Aleksandrovska (2011-2018), where she was a pediatric pulmonology specialist, a PhD student and assistant professor. She also works as a consultant paediatrician and pediatric pulmonologist at the UMHATEM "N.I. Pirogov" and the INSPIRO Medical Center.

Since 2018, she has been a member of the team of the Pediatrics Clinic of UMHATEM "N.I.Pirogov" as a paediatrician and pediatric pulmonologist. Since 2020, she has been chief assistant at the HealthCare Department of the Medical University of Sofia, Bulgaria. Since 2023, she has worked at the Private Medical Center "Neoklinik" and is an established researcher at the University of St. Kliment Ohridski" under the SUMMIT project.

Dr Lazova specialises in paediatrics, pediatric pulmonology and phthisiology, allergology and immunology in Bulgarian and foreign clinical units and she presents the necessary evidence. She has specialisations in General Pediatrics and Pediatric Pulmonology and Phthisiology, and has a master degree in Clinical Trial Management.

Dr. Lazova speaks English, German and Greek and has good computer skills.

Her scientific interests are in the field of paediatrics, pediatric pulmonology, allergology and functional diagnostics. She has teaching experience in paediatrics and pediatric pulmonology and phthisiology and experience in the development and implementation of scientific projects, experience in the Working Committee on Health Technologies Assessment, incl. participation and postgraduate professional training in international courses and practical workshops.

Dr. Snezhina Lazova is a member of the Bulgarian Pediatric Association, Bulgarian Association of Pediatric Pneumology and Phthisiatry, Bulgarian Society of Pulmonary Diseases, European Respiratory Society (ERS) and European Academy of Allergology and Clinical Immunology (EAACI).

2. TEACHING ACTIVITIES AND SKILLS

The candidate has nearly 10 years of experience teaching paediatrics to students in the specialities - nurses, midwives, physician assistants, kinesitherapy and clinical trial management, pediatric specialists, English-speaking medical students, and participation in examination committees. In the beginning, she was an honoured lecturer, but the qualities she showed were the reason for her to be appointed as a chief assistant at the Healthcare department of The Faculty of Public Health, the Medical University of Sofia, based in the Pediatrics Clinic of the UMHATEM "N.I. Pirogov" UMBALSM, starting in 2020. For the period 2020-2023, according to the presented reference, dr Lazova has 125 teaching hours of lectures and exercises yearly. The reference of the department of educational and scientific activities of the UMHATEM "Pirogov" proves that as a lecturer of 6th-year students for the year 2022/2023, Dr Lazova has 6

hours of lectures and 20 hours of practical exercises. She is the supervisor of two pediatric fellows.

My personal impressions of Dr. Lazova's teaching skills are few, but she clearly knows how to intrigue the students she teaches, as well as those present at scientific forums. In addition, she is a hardworking, diligent, precise and communicative physician and scientist who works well in a team.

3. SCIENTIFIC AND RESEARCH WORK

Dr. Lazova has published a total of 128 publications. 62 articles have been published in Bulgarian journals and 28 abroad, 9 of them are journals with IF. The author also has 29 abstracts published in IF journals. Three of the publications abroad are chapters of collective monographs. For the competition for the academic position "Associate Professor", the candidate submits 20 publications in journals, referenced and indexed in worldwide databases with scientific information (Web of Science and Scopus) – 13 of them after the year of awarding the "PhD" degree.

Publications in non-refereed journals – they are 39, of which 26 are after the year of awarding the "PhD" degree.

Dr. Lazova took part in 50 scientific forums -25 in Bulgaria and 28 abroad in poster sessions, poster discussions and lectures, at which 78 scientific abstracts were presented. Three of the presented posters were awarded with an award - two with first prize and one with third prize.

The total IF of scientific works is 112,212, and the IF from publications after the PhD defence is 26,767. Eleven publications have a Thomson Reuters impact factor (total IF 45,092 - articles - 24,645, reports -20,447).

From publications in journals referenced and indexed in world-renowned databases data with scientific information (Web of Science and Scopus) 45 in number, in 18 (40.0%) Dr Lazova is first or last author, in the rest, she is the second and next author. Of the publications in journals not indexed in the world database, but with scientific review, 77 in number, she is the first author in 48 (62.3%).

The candidate presents participation In 3 collective monographs In English, two of which are referenced in Scopus.

An official citation report from the Central Medical Library is provided, according to which the applicant has 21 citations in journals referenced in SCOPUS (Elsevier) and 25 citations in Web of Science (Clarivate). In addition, there are 9 citations in journals from other foreign freely available online sources (proofs provided). 22 citations were reported from the Central Medical Library repository (list provided). Two of the candidate's publications have been cited in a university textbook.

A large part of the scientific research activity Is realized within the framework of scientific projects. Seven of them are financed and administered by the Medical Science Council of the Medical University of Sofia. In one project, the candidate participates as a full-time doctoral student. In another 6 GRANT projects, Dr. Lazova participated as a researcher in their overall implementation, incl. in presenting the results at congresses and through scientific publications. The projects are related to pulmonological, functional, microbiological,

immunological and socio-medical problems. During her work at UMHATEM "N.I. Pirogov" UMBALSM, the candidate participated in two scientific projects related to the work of the Pediatric Department.

Dr. Lazova also participated in an international project under the program "ERASMUS+KA2010" Improving the training of nurses on clinical pathways together with researchers from the Kapodistrian University, Athens, Greece. Most of the presented projects have been completed and their overall evaluation is excellent. Not a small part of the candidate's publications are related to them.

All that has been said is a good testimony of Dr. Lazova's ability to generate ideas, organize and realize their implementation, and present the results to the medical community.

4. CLINICAL AND DIAGNOSTIC WORK AND EXPERIENCE

The candidate has a total clinical experience of 13 years. During this time, she encountered a variety of general pediatric pathology. She has a solid experience in working with children with respiratory tract diseases. She received rich theoretical training, which allowed her to successfully pass exams in 2 specialities (general paediatrics and pediatric pulmonology and phthisiology). Now she enthusiastically passes on her knowledge and experience to future doctors and young specialists. Over the years, Dr. Lazova also accumulated enough organizational experience, which also gives her opportunities to successfully deal with clinical-diagnostic and therapeutic tasks arising in the process of daily work.

5. EVALUATION CANDIDATE'S SCIENTIFIC WORKS AND CONTRIBUTIONS TO THE OVERALL ACADEMIC DEVELOPMENT

Following the scientific work of Dr. Lazova, I see in her person, a capable and searching researcher, combining the qualities of a good clinician and scientist, who uses modern diagnostic and therapeutic methods. At the same time, the aspiration to always improve the diagnostic-therapeutic process is emphasized. This is a reason for me to give a high evaluation of the skills of Dr. Lazova, as a scientist whose activity is related to clinical paediatrics, who knows how to use paraclinical research at the patient bedside, without limiting herself to a single goal - a large number publications.

Dr. Lazova's main scientific and clinical interests cover general pediatric pathology and diseases of the respiratory system in childhood. The focus is on bronchial asthma and atopy in children, lung function testing, chronic wet cough, dysfunctional breathing and various respiratory infections.

The thematic distribution of scientific work and contributions related to the research and publication activity of Dr. Lazova outside the PhD topic is distributed as follows:

- 1. Bronchial asthma in childhood
- 2. Lung function testing (LFT)
- 3. Immunological aspects of childhood asthma and chronic lung diseases.
- 4. Virological and molecular diagnostics of respiratory infections.
- 5. Microbiological aspects of cystic fibrosis and chronic lung diseases.
- 6. Coronavirus infection (COVID-19) in childhood

7. Multisystem inflammatory syndrome in children (MIS-C in COVID-19) - a new complex immunological disease with multiorgan involvement and a severe clinical course.

I highly appreciate Dr. Lazova's scientific research in these areas, and without underestimating her other contributions, the following scientific achievements are especially interesting and important to my prespective:

- 1. The practical application of LFT in the process of both diagnosis and treatment and monitoring of bronchial asthma in children. In addition to conventional spirometry (initial and after administration of a fast-acting β-agonist), the candidate applies new alternative methods in preschool children the method of forced oscillations. Dr. Lazova pays particular attention to the algorithm of interpretation of spirometry in cases with a normal initial FEV1, analysis of the shape of the flow-volume curve, indicators of peripheral obstruction and the application and interpretation of tests for bronchial reversibility. In addition to children with bronchial asthma, the candidate applies FID methods to evaluate lung function in children with spinal curvatures and sternum deformities, both before and after surgical correction, to demonstrate the effect obtained.
- 2. 2. The study of multisystem inflammatory syndrome in children with COVID-19, with a project entitled "Study of the clinical and laboratory characteristics of children with multisystem inflammatory syndrome (MIS-C)". It collected and analyzed information on clinical symptoms, clinical laboratory and imaging studies, clinical course and follow-up of children with MIS-C; a register has been created for these children; the collected, stored and analyzed information about the clinical and laboratory characteristics of MIS-C will serve in the training of the specialists and specialists in the Department of Pediatrics in recognizing the symptoms and laboratory characteristics of the syndrome with a view to early and accurate diagnosis; this makes it possible to create an algorithm for the treatment of children with MIS-C, according to world recommendations and available possibilities; will serve to raise the attention of the medical community to this new nosology and to develop the scientific activity of the UMHATEM "N.I. Pirogov", with the realization of publications in refereed scientific publications.
- 3. Dr Lazova is interested in pneumococcal diseases in childhood and the course of pneumonia in children before and after the COVID-19 pandemic, as well as the dynamics of invasive pneumococcal infections before and after the introduction of the conjugated pneumococcal vaccine in the immunization calendar of Bulgaria.
- 4. "Study of the health risks of energy drink intake in children and adolescents", as a result of which publications were realized, results were presented at scientific forums and health talks were held in several metropolitan schools on this little commented topic about the dangers of abuse of energy drinks in our country.

6. REMARKS

I have no critical remarks. I believe that Dr. Lazova has the opportunity to realize a clinically oriented monograph related to her studies of the possibilities of FID in childhood.

7. CONCLUSION

I emphasize again that Dr. Lazova is an erudite specialist doctor, teacher and scientist. In her relatively short practice as a doctor, rehabilitator and scientist, she has successfully acquired the necessary practical and organizational experience that allows her to cope with the tasks set by the daily practice of a paediatrician and a pediatric pulmonologist, and they are often quite complex and challenging.

Dr. Lazova's scientific output is her personal work. The results are authentic, especially those related to FID studies, as this also applies to the other areas of the candidate's learned interests, which are the result of thorough research and the use of modern highly informative methods. The contributions are undeniable. Some of them provide new knowledge on the topic of FID in childhood and with other areas of paediatrics and pediatric pulmonology. They need to be strengthened, with more material and evidence.

I wish Dr. Lazova every success in her future endeavours.

All that has been said for me is a reason to consider that the candidate fulfils the criteria and scientific-metric indicators defined in the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its Application and the Regulations for the Conditions and Procedures for Acquiring Scientific Degrees and Occupying academic positions and Qualitative criteria for the development of the academic staff of the UMHATEM"N.I. Pirogov", Sofia, Bulgaria. Therefore, I recommend to the esteemed members of the Scientific Jury to give our positive vote and to award the academic position "associate professor" in paediatrics to <u>Dr. Snezhina Mihailova Lazova</u>, MD, for the needs of the Pediatric Clinic, UMHATEM "N.I. Pirogov", Sofia, Bulgaria.

8.11.2023 Ploydiy Signature: /prof. T. Schmilev/