

To the chairman of the scientific jury,
as defined by Order No P-109-300/07.08.2020
of the Rector of the Medical University - Varna

STATEMENT

by Assoc. Prof. Nina Dimitrova Tsvetkova, PhD,
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Regarding: A competition for the occupation of the academic position "*Associate Professor*" in Medical University (MU) of Varna.

General presentation of the procedure. The competition was announced in the State Gazette, issue 53/12.06.2020, in the higher education area 4. "Natural sciences, mathematics and informatics", professional field 4.3. "Biological sciences", scientific speciality "Parasitology and Helminthology", for the needs of the Faculty of Medicine, Department "Infectious Diseases, Parasitology and Dermatovenereology", Medical University - Varna. Only one candidate has submitted documents for participation in the competition - Dr Kalina Stoyanova Pavlova, PhD, chief assistant in the same department. According to a decision of the Faculty Council of the Faculty of Medicine at MU-Varna (Protocol No 26/13.07.2020) and by order No P-109-300/07.08.2020 of the Rector of the MU-Varna I was appointed as an external member of the Scientific Jury (SJ) on the procedure of acquiring the academic position of "Associate Professor" at MU-Varna. According to Protocol No 1 of the first SJ meeting, I was assigned to prepare a statement.

The procedure for announcing the competition for "Associate Professor" has been followed. The candidate has submitted a set of materials on paper and electronic media, as well as the necessary documents for review, according to the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB) (section III, art. 24-26), the Regulations on its implementation and the Regulations for the Development of the Academic Staff of the Medical University-Varna.

Candidate's career development. Dr Pavlova graduated with honours from the Medical University "Prof. Dr Paraskev Stoyanov" Varna with a master's degree in Medicine in 2001. The same year she started working as a physician in an Outpatient clinic for primary care and individual practice - B. Tuncheva - Varna. Since 2002 Dr Pavlova has occupied the position "assistant" at the Department of Infectious Diseases, Parasitology and Dermatovenereology at the MU "Prof. Dr Paraskev Stoyanov" Varna and became a lecturer in "Parasitology and Tropical Medicine". In 2006 she acquired the medical speciality "Medical parasitology", and in 2017 she was granted the educational and scientific degree "Doctor" in "Parasitology and helminthology" after defending her thesis: "Epidemiological studies and analysis of risk factors for the distribution of the intestinal parasitoses with person-to-person transmission in Varna district." After 2018 she occupied the academic position "Chief Assistant" at the MU "Prof. Dr Paraskev Stoyanov" Varna. She has had a position of a head of the parasitology laboratory within the Independent medical-diagnostic laboratory (IMDL)

"Exactlabor 2002" (between 2006 - 2009) and the IMDL "Status" Ltd. (since February 2009 until now), with 11.4 years work experience (Certificate No 195/22.06.2020 of IMDL "Status" Ltd.). Since June 2015, Dr Pavlova has been chosen for a course leader of the 5th year medical students at MU-Varna, at the end of 2016 she was elected to the position "quality manager" at the Department of Infectious Diseases, Parasitology and Dermatovenereology of MU-Varna, and since October 2017 - an administrative assistant at the same department. The total professional experience is 19.3 years (Certificate No 099-2128/09.07.2020 of MU-Varna).

The multiple specialisations in authorised parasitological laboratories in the country and abroad contributed to Dr Pavlova's development as a specialist parasitologist - she has attended a total of 14 courses for postgraduate training. She is a member of the Bulgarian Medical Association, the Bulgarian Association of Medical Parasitologists (BAMP) and the Bulgarian Parasitological Society. Dr Pavlova has been a member of the control commission of BAMP since 2018 and a member of the expert council in the medical speciality "Medical Parasitology" at the Ministry of Health since 2019.

The presented documents show Dr Pavlova's ascending development as a scientist and specialist-parasitologist. Furthermore, her professional qualification corresponds to the specified habilitation in the scientific field and are following the Regulations of the MU-Varna for application of LDASRB.

Research activity and related contributions. For participation in the competition, Dr Pavlova presents a total of 72 scientific papers, of which: one dissertation paper, three peer-reviewed monographs (one as a habilitation work), eight science publications in editions, referenced and indexed in world-renowned databases with scientific information (Web of Science and Scopus), two published chapters from a collective monograph – all these covering the minimum requirements for acquiring the academic position "Associate Professor", as well as 24 printed full-text publications, two chapters from collective monographs and 32 participations in national and international scientific events. The articles have been published in prestigious international - *Helminthologia*, *Macedonian Journal of Medical Sciences*, *Environmental Research*, *International Journal of Current Microbiology and Applied Sciences* and Bulgarian medical journals - *Journal of IMAB*, *Biomedical Reviews*, *Problems of Infectious and Parasitic Diseases*; *Experimental Pathology and Parasitology*, *Varna Medical Forum*, *Science Infectology and Parasitology*, *Infectology*, *Health Economics and Management*, *Journal of the Union of Scientists - Varna*, *Information Journal of NCIPD*, etc. The total Impact Factor is 3,287.

In the presented as a habilitation work (*monograph*) "Cryptosporidiosis - modern aspects of taxonomy, clinic, diagnosis and treatment" contemporary data of Bulgarian and foreign researchers regarding cryptosporidiosis are analysed, and Dr Pavlova's own experience in the diagnosis of the disease among individuals in the Varna region is also presented. The other two monographs are related to the epidemic process of cryptosporidiosis ("Cryptosporidiosis - epidemiology of a hidden parasite") and epidemiological characteristics, clinical manifestations, diagnosis and treatment of two common intestinal parasitic diseases in the world and our country ("Enterobiasis and Giardiasis - current issues"). These monographs are illustrated with a significant number of figures, tables and photomicrographic images, which are the author's personal work, and include data from her own research results on

various aspects of the three parasitoses, and are a useful tool for both students and trainees, and a wide range of medical specialists - parasitologists, paediatricians, gastroenterologists, infectious disease specialists and general practitioners.

The data from the academic reference presented (No. 308/07.07.2020), concerning the citations of Dr Pavlova's publications from Scopus and Web of Science, show 59 citations (without auto-citations). Additional 44 citations in other international and 6 in Bulgarian editions are listed.

Dr Pavlova has participated in two research (one international and one under the Fund "Science") and one educational projects. The international project "Epidemiology of parasitic diseases transmitted by water in Russia and Bulgaria" is a collaboration with Germany and Russia and is funded by the University of Cologne, Germany. Dr Pavlova is a project manager of the Bulgarian research project - "Seroprevalence of toxocariasis in risk groups and the general population of North-eastern Bulgaria", funded by the MU-Varna.

The main directions in Dr Pavlova's research are related to the epidemiology, aetiology, diagnosis, and treatment of local and imported parasitoses and I estimate as more significant and original the following contributions:

- The present characteristics of the epidemic process of intestinal parasitoses enterobiasis, hymenolepiasis, giardiasis, blastocystosis and cryptosporidiosis on the territory of Varna district are determined; extensive indicators are assessed, and an analysis of the effect of factors such as age, sex, residence, seasonality, occupation on the risk of invasion is made. By applying mathematical models, trends in increase/decrease in enterobiasis and giardiasis are estimated.

- The established significant contamination of drinking water sources in Varna district with (oo)cysts of *Cryptosporidium spp.* and *G. duodenalis*, which is an indicator of the potential hazard for public health, is of essential scientific and practical significance. For the first time in Varna district cases of cryptosporidiosis among people have been diagnosed, and an analysis of the extensive indicators of the disease has been made. By the introduction of laboratory methods for morphological (modified Zill-Nielsen staining) and immunological (immunochromatographic test) identification of *Cryptosporidium spp.*, the spectrum of diagnosis of intestinal parasitic diseases in the region is expanded.

- The ELISA method for the detection of anti-Toxocara antibodies in human serum and confirmatory Western Blot method implemented in diagnostic practice have scientific and practical impact. High levels of seroprevalence and a significant frequency of toxocariasis in different population groups have been detected.

- Sanitary - parasitological study conducted of the environmental samples from public places in the city of Varna has resulted in detection of contamination with eggs of *Toxocara spp.* and other parasites in dogs, drawing attention to the real hazard of transmitting zoonotic infections and the need for adequate control of domestic and stray animals.

Teaching activity. Dr Pavlova began her teaching career in 2001 as an assistant in the Department of Infectious Diseases, Parasitology and Dermatovenereology at MU-Varna and passed successively through the positions of "Senior Assistant" and "Chief Assistant" with a total teaching experience of 18 years and seven months (Certificate No. 099-2129/09.07.2020 of MU-Varna). The attached reference issued by the Medical University of Varna (Certificate

No. 112-146/21.07.2020 years), shows that for the period 2015/2016 to 2019/2020 the average annual workload of Dr Pavlova ranged from 219 up to 402 hours. For the specified 5-year period it is divided into 598 hours of lectures and 969 hours of exercises (of which in English 18 hours and 816 hours, respectively).

Dr Pavlova conducts theoretical and practical training in "Medical Parasitology" of 5th year students (in Bulgarian and English), of 6th year trainee doctors of the speciality "medicine" of the freely selectable module "Tropical Medicine" at MU-Varna; of students from the specialities "nurse" and "midwife" in MU-Varna and affiliates in the cities Sliven, Shumen, and Veliko Tarnovo; of students from speciality "laboratory technician" in the 2nd and 3rd year, of students of the speciality "Public Health Inspector" from 1st year training at the Medical College of Varna; theoretical training of students in the speciality "medical laboratory assistant" 2nd year of the freely selectable discipline "Current trends in parasitological research in Bulgaria". She conducts practical and theoretical training in "Medical Parasitology" in postgraduate courses, individual forms of training within the syllabuses of various courses and specialisation programs at the Medical University and Medical College of Varna.

In addition to the development of lectures and exercises in "Medical Parasitology" for students in the above specialities Dr Pavlova has participated in the development and maintenance of courses for auxiliary e-learning in "Medical Parasitology" in the electronic system Blackboard Learn+ of the Medical University - Varna, the affiliates in Sliven, Shumen and Veliko Tarnovo, and the Medical College - Varna, including the necessary teaching and examination materials in all the above disciplines in connection with the distance learning format for the summer semester of the academic year 2019/2020.

Conclusion

Dr Kalina Stoyanova Pavlova fully meets the requirements of LDASRB and Regulations of the MU-Varna for the academic position "*Associate Professor*". Documents, evidence, research, and teaching activities presented for the competition, as well as my personal impressions, confirm Dr Pavlova's qualities as an established parasitologist, scientist and lecturer. Her theoretical knowledge and practical skills, scientific production with contributions in the field of medical parasitology will help her future realisation as an associate professor in the Department of Infectious Diseases, Parasitology and Dermatovenereology at the MU-Varna.

All the above gives me a reason, as a member of the scientific jury, to give my positive assessment for the election of Dr Kalina Stoyanova Pavlova for the academic position "*Associate Professor*" in the scientific speciality "Parasitology and Helminthology" at the Medical University "Prof. Dr Paraskev Stoyanov" - Varna and to recommend to the members of the SJ to vote positively.

Signature:



October 6, 2020

Assoc. prof. Nina Tsvetkova, PhD

