

STATEMENT

from

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Concerning: Announcement of the competition for the academic position "Associate Professor" in the field of higher education 4. Natural sciences, mathematics, and informatics, professional field 4.3. Biological sciences, scientific speciality "Parasitology and Helminthology" for the needs of the Department of Infectious Diseases, Parasitology and Dermatovenereology, Faculty of Medicine, Medical University "Prof. Dr Paraskev Stoyanov" – Varna, published in State Gazette No 53/12.06.2020.

According to Order № P-109-300 / 07.08.2020 of the Rector of MU-Varna and the Decision of the first meeting of the Scientific Jury, I have been appointed to prepare a statement.

The only candidate in the announced competition for the acquisition of academic degree "Associate Professor" at the Department of Infectious Diseases, Parasitology and Dermatovenereology is Dr Kalina Stoyanova Pavlova, PhD. The candidate has submitted all the required documents specified in the Regulations for the development of the academic staff of MU-Varna. The documents have been prepared following the Law for development of the academic staff in the Republic of Bulgaria and the Regulations for its implementation of MU-Varna.

BIOGRAPHICAL DATA

Dr Kalina Stoyanova was born in Varna. In 2001 she obtained a master's degree in medicine at the Medical University "Prof. Dr Paraskev Stoyanov" - Varna, graduating with honours. In 2001 Dr Stoyanova started working as an assistant general practitioner at AIP-PMH "Dr Boyka Tuncheva", and in December of the same year was appointed as a resident in parasitology at MU-Varna. After a competition, in March 2002 she acquired the academic position of "assistant" at the Department of Infectious Diseases, Parasitology and Dermatovenereology of MU-Varna, where she still works nowadays. Dr Stoyanova acquired a medical speciality in Medical Parasitology in 2006. In 2017, as a doctoral student at the Sector of Parasitology and Tropical Medicine of the National Center for Infectious and Parasitic Diseases, Sofia, she obtained a

scientific and educational degree "Doctor" in the scientific speciality "Parasitology and Helminthology". In June 2018, after a competition, she obtained the academic position of "Chief Assistant" at DIDPDV of MU-Varna.

Dr Kalina Stoyanova also performs several administrative duties - course leader of 5th-year medical students (since 2015); quality manager (since 2016) and administrative assistant (since 2017) of DIDPDV.

At the same time, Dr Kalina Stoyanova carries out diagnostic and consultative-therapeutic activities as head of two specialised parasitology laboratories at SMDL "Exactlabor 2002" (between 2006 - 2009) and SMDL "Status" (since 2009 to date).

Dr Stoyanova is a member of the Bulgarian Medical Association, the Bulgarian Parasitological Society and the Bulgarian Association of Medical Parasitologists. In 2019, by order of the Minister of Health, she was appointed to the expert council in the medical speciality "Medical Parasitology" at the Ministry of Health.

Over the years, Dr K. Stoyanova has improved her knowledge by attending numerous postgraduate courses in the country and abroad. She speaks excellent English and spoken Russian. She has outstanding computer skills.

SCIENTIFIC AND RESEARCH ACTIVITY

In fulfilment of the minimum requirements for the current competition, Dr Kalina Stoyanova, PhD, presents the following scientific production:

Criterion A.1. Dissertation for the acquisition of the educational and scientific degree "Doctor" on "Epidemiological studies and analysis of risk factors for the distribution of the intestinal parasitoses with person-to-person transmission in Varna district" - 197 pages - *50 points*.

Criterion B.3. Habilitation thesis (monograph) on "Cryptosporidiosis - current aspects of taxonomy, clinical presentation, diagnosis and treatment" - 187 pages - *100 points*.

The presented monograph is prepared personally by the candidate and is a comprehensive and systematic presentation of a current scientific problem, does not repeat existing knowledge, has two scientific reviewers and meets all other requirements according to paragraph 1, item 10 of the LDASRB.

Criterion D.5. Monographs that are not presented as the main habilitation work:

- Monograph on "Cryptosporidiosis - epidemiology of a hidden parasitosis" - 194 pages - *30 points*.

- Monograph on "Enterobiosis and giardiasis - current problems" - 174 pages - *30 points*.

Criterion D.7. Publications in scientific papers, referenced and indexed in world-renowned databases (Web of Science and Scopus) - 8 titles - *115 points*.

Criterion D.8. Published chapters from a book or collective monograph - 2 titles - *30 points*.

Criterion D.11. Citations in scientific publications, monographs and collective volumes, referenced and indexed in world-renowned databases with scientific information (Web of Science and Scopus) – in 25 papers, according to Academic reference №308 / 07.07.2020 issued by the Library of MU-Varna - *50 points*.

The scientific production presented by the candidate meets and exceeds the state requirements for attaining the academic position of "Associate Professor" according to the Law for development of the academic staff in the Republic of Bulgaria and the Regulation for its implementation at MU-Varna.

In addition to the evidence to meet the minimum state requirements, 24 full-text publications in Bulgarian and international scientific journals with ISSN are presented. According to the Academic Reference № 311 / 07.07.2020 issued by the Library of MU-Varna, the candidate's publications have $IF = 3.287$. The scientific activity of the candidate includes a list of 32 participations with reports and posters presented in 14 international and 18 national congresses, conferences, and national forums with international participation. Furthermore, Dr Stoyanova has two participations in scientific projects, in one of which she is a project supervisor and one participation in an educational project of the Ministry of Education and Science.

Of the presented total of 37 scientific works - three monographs and three publications are solo works, and in 16 scientific papers, Dr Stoyanova is the first author. Therefore, in a total of 59.4% (22 titles) of the scientific production, the candidate is the sole or lead author. In the other 15 works, Dr Stoyanova is the second (seven titles) or subsequent (eight titles) co-authors.

The scientific work and the results of the research activities of the candidate can be divided thematically in the following scientific fields:

1. Studies on the epidemiology, aetiology, diagnosis, clinical presentation, treatment, and control of intestinal and some opportunistic parasitoses.

- The extensive and long-term epidemiological and clinical studies on the problems of intestinal parasitosis are impressive. For the first time, the contemporary characteristics of the epidemic process of several diseases

(enterobiosis, hymenolepidosis, giardiasis, blastocystosis, cryptosporidiosis) were determined on the territory of Northeastern Bulgaria and Varna region. Assessed and analysed are the extensive indicators and the impact of several demographic factors on the risk of invasion.

- Systematically researched is the prevalence of intestinal parasitoses among children, adolescents, and adults, persons professionally engaged in socially important industries (food sector, health, and social institutions), and among hospitalised persons with diarrhoea. Undiscovered so far levels of asymptomatic carriers have been identified, both among the entire population and by age groups.

- Dr Stoyanova's research on the issues of the most common intestinal parasitoses in our country (enterobiosis, giardiasis, blastocystosis) is summarised in several publications, participation in scientific forums, and a separate monograph.

- Innovative for the Bulgarian parasitology, statistical and mathematical models are used in the research work of the candidate. They reveal the current spread of the intestinal parasitoses in our country and the region and create forecast models for future trends.

- A significant share of the candidate's research work is focused on one of the least studied opportunistic intestinal parasitosis in the country - cryptosporidiosis.

- Of scientific and practical importance are the first of its kind for the country and the region sanitary and parasitological studies on the infestation of water sources with cysts of protozoa with the waterborne transmission (*Cryptosporidium* spp. and *G. duodenalis*), performed using the most modern methods of identification - immunofluorescence, DIC and PCR.

- The first cases of cryptosporidiosis among people in the region of Northeast Bulgaria have been registered and described with an analysis of the relative share of the disease among children and adults, in clinically manifested cases and asymptomatic carriers.

- Of practical importance are the laboratory methods implemented in North-eastern Bulgaria for morphological (modified Zill-Nielsen staining) and immunological (immunochromatographic test) identification of *Cryptosporidium* spp.

- A complete and in-depth analysis of the clinical, diagnostic, therapeutic and etiological and epidemiological aspects of cryptosporidiosis was shown in the habilitation work and one additional monograph. They allow this little-known opportunistic parasitosis to be presented to the medical specialists from different fields - infectious diseases,

gastroenterologists, paediatricians, epidemiologists, general practitioners, and others.

2. Studies of epidemiology, aetiology, diagnosis, clinical presentation, treatment, and control of some zoonoses.

The work of the candidate on the problems of toxocariasis - parasitic zoonosis unexplored so far in the Varna region - is of extreme scientific and practical importance. The implementation of serological testing for specific antibodies by ELISA and Western blot allows to identify, confirm, and describe the first cases of toxocariasis in children and adults and their vast clinical diversity. For the first time, the levels of seroprevalence of this parasitosis among different risk groups were studied and registered.

The first sanitary-parasitological examination of the environment in the city of Varna was carried out. The discovered contamination with eggs of *Toxocara* spp. and other parasites in dogs, proves the real and imminent danger of transmitting zoonotic infections in the region.

3. Studies of epidemiology, aetiology, diagnosis, clinic, treatment, and control of malaria and other imported parasitoses.

From a scientific and practical point of view, the examined clinical cases of patients with imported tropical diseases (malaria, schistosomiasis) and the chronological follow-up of the cases of malaria registered in the Infectious Diseases Clinic - Varna are of serious interest. They confirm the public significance of the imported infections as a regional problem connected to shipping and sea tourism.

4. Epidemiology of some infectious diseases

The candidate's research on the social factors determining the epidemiology and spread of infectious diseases are reflected in many multidisciplinary publications in partnership with research teams from different specialities - infectious diseases, epidemiology, hygiene, social medicine, and others.

According to Academic Reference №308/07.07.2020 issued by the Library of MU-Varna, the scientific work of Dr K. Stoyanova has been cited a total of 59 times in scientific journals, monographs and collective volumes, referenced and indexed in world-renowned databases with scientific information (Web of Science and Scopus), excluding auto-citations. For the same period, the candidate's production was cited 44 more times in other international publications, monographs and dissertations and six times in Bulgarian scientific journals. These data confirm the scientific value and the substantial impact of the candidate's work in national and foreign literature.

TEACHING AND EDUCATIONAL ACTIVITY

According to the presented certificate № 099-2129 / 09.07.2020, Dr Kalina Stoyanova has over 18 years of teaching experience with an average study load in the last five years over 310 hours (Reference № 112-146 / 21.07.2020). Therefore, this meets and exceeds the required minimum of LDASRB and the Regulations for its implementation of MU-Varna.

As a university lecturer, Dr Stoyanova educates medical students (Bulgarian and English language programs), medical laboratory technicians, public health inspectors, nurses and midwives in the structures of the Medical University, the affiliates in Sliven, Veliko Tarnovo and Shumen, and Medical College-Varna. Dr Stoyanova develops and systematically updates the curricula for theoretical and practical training in all disciplines with the study of medical parasitology and participates as a member or chairman of the relevant examination committees. Dr Stoyanova supervises specialists in medical parasitology and courses in the same discipline in the programs for specialisation in microbiology, virology, hygiene, infectious diseases, and others as well as individual courses for postgraduate training.

MEDICAL AND DIAGNOSTIC ACTIVITY

Dr Kalina Stoyanova is an established diagnostician and healer. She acquired a degree in medical parasitology in 2006 and subsequently built and managed one of the most modern parasitological laboratories in North-eastern Bulgaria. The laboratory is continuously implementing innovative and unique for the region methods for morphological and immunodiagnosics, which expands the range and availability of parasitological testing. The medical-consultative activity occupies an essential place in the professional practice of the candidate. In addition to her direct work with patients from all over North-eastern Bulgaria, as an established expert Dr Stoyanova advises general practitioners and specialists in outpatient and hospital care from Varna and the region on the issues of differential diagnosis and treatment of parasitic diseases. Her election as a member of the expert council in the medical speciality "Medical Parasitology" at the Ministry of Health testifies for the esteemed professional qualities of Dr Stoyanova.

CONCLUSION

Dr Kalina Stoyanova Pavlova, PhD, is a skilled and established specialist in the field of medical parasitology, with excellent professional training and

proven qualities. She is an educator with many years of experience, respected by her students and colleagues.

The documents presented in the competition fully meet the mandatory and specific requirements and scientometric criteria according to Law for development of the academic staff in the Republic of Bulgaria and the Regulation for its implementation at MU-Varna. Thus said, together with the personal qualities of the candidate, gives me the grounds to give a positive opinion and to propose to the respected members of the Scientific Jury to approve the award of the academic position of "Associate Professor" to Dr Kalina Stoyanova Pavlova, PhD.

1.10.2020 г.

Varna

Prof. Dr Margarita Gospodinova-Bliznakova, PhD

