To Prof. Dr Margarita Gospodinova, PhD Chairman of the Scientific Jury, appointed by order No P-109-300 / 07.08.2020 of the Rector of the Medical University - Varna for the announced competition for Associate Professor State gazette No 53 / 12.06.2020

# STATEMENT from Prof. Dr Temenuga Zhekova Stoeva, PhD Medical University Varna Department of Microbiology and Virology

concerning a competition for acquiring 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, Sector of Infectious Diseases and Parasitology at the Medical University - Varna announced in State gazette No 53 / 12.06.2020

with candidate Chief Assistant Dr Kalina Stoyanova Pavlova, PhD

#### CAREER DEVELOPMENT

Dr K. Stoyanova graduated in medicine at the Medical University - Varna in 2001 with full honours. Since December 2002 she has been working in the Department of Infectious Diseases, Parasitology and Dermatovenereology of MU-Varna as an assistant, senior (since 2007) and chief assistant (since 2018). In 2006 Dr Stoyanova acquired the speciality "Medical Parasitology". In the period 2016 - 2017, she completed and successfully defended a dissertation for the acquisition of the educational and scientific degree "Doctor" in the scientific speciality "Parasitology and Helminthology". Since 2009 and until now, she is the head of the parasitological laboratory at Specialized Medical Laboratory "Status" -Varna.

In 2004 and 2005, Dr Stoyanova has conducted individual training courses at the University of Cologne, Germany on molecular diagnostic research methods in the field of parasitology, which contribute to her professional development and research. The candidate has participated in two research projects, one - international and one in the Science Fund of MU-Varna, of which she is the project manager.

Dr Stoyanova is a member of prestigious scientific organisations in Bulgaria such as the Bulgarian Association of Medical Parasitologists and the Bulgarian Parasitological Society. Since April 2019 she is a member of the expert council on the medical speciality "Medical Parasitology" at the Ministry of Health.

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## SCIENTIFIC ACTIVITY

### Scientific production

The presented documentation of Dr K. Stoyanova is in accordance with the requirements for conducting a competition for the academic position "Associate Professor". For the participation in this competition, she has submitted a total of 37 scientific papers, which are distributed as follows:

- 1. Monograph habilitation thesis: "Cryptosporidiosis current aspects of taxonomy, clinic, diagnosis and treatment" 1 issue
- 2. Monographs that are not presented as the main habilitation work 2 issues
- 3. Publications in journals, referenced and indexed in world-famous databases with scientific information 8 issues
- 4. Published chapters from a collective monograph 2 issues
- 5. Full-text publications in Bulgarian and international scientific journals with ISSN 24 issues
- 6. Participation in scientific forums 32: international 14, national 18.

The research activity of Dr K. Stoyanova is presented in four main areas, all directly related to current issues of modern clinical parasitology and medical practice, with emphasis on one of the least studied in the country opportunistic intestinal parasitosis - cryptosporidiosis.

Significant scientific contributions have been made in all areas, and I would like to highlight the most important of them:

- The first cases of cryptosporidiosis in North-eastern Bulgaria have been proven and described.
- An in-depth analysis of the epidemiology, clinic, diagnosis, and treatment of opportunistic intestinal parasitosis cryptosporidiosis was performed, and the candidate's studies skilfully supported the analysis.
- The first for the country and the region studies on the infestation of water sources with cysts of protozoa with waterway transmission (*Cryptosporidium* spp., *G. duodenalis*) were executed using modern diagnostic methods (immunofluorescence, DIC and PCR).
- Introduced in the laboratory parasitological practice in North-eastern Bulgaria are methods for morphological (modified staining according to Zill Nielsen) and immunological (immunochromatographic method) identification of *Cryptosporidium* spp.
- For the first time, the contemporary characteristics of the epidemic process of intestinal parasitosis (enterobiosis, hymenolepidosis, giardiasis, blastocystosis and cryptosporidiosis) in North-eastern Bulgaria and Varna region for a substantial period (12 years) have been determined and analysed. New for the country and the region are the analyses in less studied groups of people (youth and adults), as well as among persons employed in the food sector, health, and social institutions.
- A wide variety and significant prevalence of intestinal parasitosis have been found among hospitalised persons with diarrhoea.

• Introduced in the regional laboratory practice are the immuno-enzyme method ELISA and the confirmatory Western blot method for diagnosis of toxocariasis, unresearched zoonosis in the Varna region.

Dr K. Stoyanova is the first or only author in 22 of the publications (59.4%), second author in 7 (18.9%) and subsequent author in 8 of them (21.6%), i.e. her leading role and contribution are a total of 78% of the scientific production. The overall IF of the scientific output is 3.287. Dr Stoyanova's research is cited 59 times in international journals, referenced and indexed in world-famous databases of scientific information (Web of Science and Scopus). Also, for the same period, the scientific production was cited 44 more times in other international publications, monographs, and dissertations and six times in Bulgarian scientific journals. All this is proof of the high scientific value of the presented publications.

### EDUCATIONAL AND TEACHING ACTIVITY

Dr K. Stoyanova is an established and respected lecturer with teaching experience over 18 years. Her total teaching workload for the last five academic years is 1567 hours, of which 834 are in the English-language program. Dr K. Stoyanova participates in the conducting of the seminars and lectures, as well as in the development of the full courses in "Medical Parasitology" for students majoring in medicine (Bulgarian and English programs), midwife, nurse, medical laboratory assistant, public health inspector. She conducts practical and theoretical training in "Medical Parasitology" to the optional module in "Tropical Medicine" of trainee doctors and courses for postgraduate education in various specialities. Dr Stoyanova has educated and trained one specialist in medical parasitology.

#### CONCLUSION

Dr K. Stoyanova is a respected and highly qualified scientist in the field of medical parasitology and with many years of experience in academic and diagnostic fields. The scientometric indicators, the contributions of her scientific production and her teaching activity are fully compliant and exceed the minimum national requirements of Law on the development of the academic staff in the Republic of Bulgaria and the minimum requirements of MU-Varna for acquiring the academic position of "Associate Professor". Based on all this, as a member of the scientific jury, I strongly support her candidacy and recommend to the esteemed members of the jury to elect Dr K. Stoyanova as Associate Professor in Parasitology and Helminthology for the needs of the Department of Infectious Diseases, Parasitology and Dermatovenereology at the Medical University - Varna.

18.09.2020

Signature: /Prof. Dr Temenuga Stoeva, PhD/