

## OPINION

On materials regarding competition for the academic rank "Associate Professor", in higher education field "6. Agricultural Sciences and Veterinary Medicine , professional field 6.4. Veterinary Medicine, scientific specialty „Epizootiology, infectious diseases and prevention of infectious diseases of animals“, scientific discipline „Infectious Diseases (Diseases in productive animals, Equine Diseases, Diseases in companion animals)“, announced by the University of Forestry, in State Gazette issue 100 of 16 December 2022, VM-AsP-1222-96.

### **Candidate:**

#### **1. Chief assistant professor Georgi Malinov Stoimenov;**

**Opinion author: PhD Vasil Kostadinov Manov, professor in 6.4. Veterinary medicine from University of Forestry**

#### **1. Short Bibliography of the candidate:**

Chief Assistant professor Georgi Malinov Stoimenov was born on April 29, 1986 in Petrich. He graduated from high school in 2005 at the Professional High School of Veterinary Medicine - Lovech. In 2011, he graduated as a Master of Veterinary Medicine in the specialty "Veterinary Medicine" at the University of Forestry (UF). Further, his professional development continued as a veterinarian in private veterinary clinic in Sofia (2011-2013). In the end of 2013, after winning a competition, he was appointed as a full-time assistant in the Department of Infectious Pathology, Hygiene, Technology and Control of food from animal origin" of the FVM at UF. In 2015, he was enrolled in the doctoral program "Epizootiology, infectious diseases and prevention of infectious diseases in animals", professional direction Veterinary Medicine. In 2017, he successfully defended his dissertation on the topic: "Studies on the influenza A viruses in wild birds in Bulgaria" and received the Educational and scientific degree "Doctor". From 2017 to the present, he is Chief assistant professor in the Department of "Infectious Pathology and Hygiene, Technology and Control of Foods from Animal Origin". The bibliographic reference of the candidate is supplemented by numerous specializations and courses in Bulgaria and abroad in the field of molecular diagnostics of infectious diseases in animals, specialized English level B2 and participation in expert groups at the International Atomic Energy Agency (IAEA), Vienna, Austria; Ministry of Agriculture, Food and Forestry and National Agricultural Advisory Service (NAAS).

#### **2. Compliance of applicant's materials and documents to the requirements listed in the Statute for Development of the Academic Staff of the University of Forestry.**

In the current competition, the candidate participates with 25 scientific works, of which 1 independent monograph, 1 book published on the basis of the dissertation work, 1 textbook published in a virtual library, 22 articles printed in scientific journals.

Fulfillment of the minimum national requirements for holding the academic position "Associate



professor":

- ✓ in indicator **group "A"**, the candidate has a defended dissertation and meets the requirement of **50** points.
- ✓ according to group of **indicators "B"** to cover the mandatory 100 points, the candidate submits a habilitation work - scientific publications (not less than 10) in journals that are referenced and indexed in Web of Science and Scopus, bringing him **140** points.
- ✓ according to group of **indicators "G"** out of the required 200 points, the candidate has presented materials that bring him **227.61** points. Accordingly: G 5-Published monograph, which is not presented as the main habilitation work-**100** points; D 6-published book based on a dissertation work for awarding the educational and scientific degree "doctor" - **40** points; G 7- Articles and reports published in scientific journals, referenced and indexed in Web of science and Scopus, respectively articles from the list of publications presented by the candidate (6, 7, 13 and 14) carrying **65** points; G 8- Articles and reports published in non-refereed journals, but with scientific review or published in edited collective volumes, respectively (20, 21, 15, 16, 17, 22, 19 and 18) corresponding to **22.61** points.
- ✓ according to group of **indicators "D"**, accounting for the number of citations with a required minimum of 50 points, the candidate presents materials for **215** points. After my investigation, I found that citation №9 in point II-Citations in non-refereed peer-reviewed journals, according to the list of citations (Appendix 15) submitted by the applicant, should be presented in the above category and scored 15, not with 5 points. In this way, the candidate's total points for this indicator would be 225 points.
- ✓ on **indicator "E"**, although according to the minimum national requirements for an associate professor and the regulations for the development of the academic staff at UF, no points on indicator "E" are required, Chief Assistant Professor Georgi Malinov Stoimenov has submitted points in E18- Participation in a national scientific or educational project **120 points** obtained from his participation in 8 projects. In point E19 - Participation in an international scientific or educational project, he declared his participation in 3 projects, bringing him respectively a total of 60 points. The total number of points for the **"E" indicator** of the candidate is **180 points**.

From the submitted report of the candidate for participation in the competition, it is clear that he fulfills the national minimum requirements, as well as those laid down in the Statute for Development of the Academic Staff of the University of Forestry, and in all indicators, he even exceeds the criteria. With a minimum of 400 points required, Chief Assistant Professor Georgi Malinov Stoimenov, PhD, collects a total of **642.61** points from all indicators (after correction in the points of indicator D),



which is a kind of certificate for his research activity. He has also submitted 180 points under indicator "E", which are not required to meet the minimum national requirements for an associate professor.

### **3. Evaluation of teaching & learning activities.**

Ch. Assistant Professor Georgi Malinov Stoimenov, PhD, has 9 years of teaching experience at the Forestry University, during this time he has been engaged in teaching, research and diagnostic activities. The educational and teaching activities of Dr. Stoimenov, are associated with conducting practical classes in the disciplines: Infectious diseases (Diseases of productive animals, diseases of equids, diseases of companion animals); Epidemiology and preventive veterinary medicine; Virology; Bee, fish and game diseases and a mobile clinic. He also participates like a lecturer of one part of the lecture courses on Infectious Diseases (Diseases of productive animals, diseases of equids, diseases of companion animals); Epidemiology and preventive veterinary medicine; Virology; Diseases of bees, fish and game; Herd health management. He is engaged in the teaching of practices and one part of the lecture course in English language students in the above-mentioned disciplines, as well as in conducting exams with students in Bulgarian and English language courses. Chief Assistant Dr. Stoimenov is an author of 1 study aid in the Blackboard Learn<sup>TM</sup> virtual library, <http://elearn.ltu.bg/>, five curricula in Bulgarian and English for the disciplines Infectious diseases (Diseases of productive animals, diseases of equids, diseases of companion animals); Epidemiology and preventive veterinary medicine; Virology; Bee, fish and game diseases; Herd Health management. He is a member of the Ethics Commission of the FVM at UF; member of the commission for organization and conduct of practice in animal husbandry, the clinical and pre-diploma internship of the FVM at UF; member of the Commission on the clinical activity of the FVM at UF; member of the Committee on Accreditation, post-accreditation monitoring and control of the FVM at UF; Committee for verification, assessment and defense of the internship reports of the students from the 5th year (in Bulgarian and English language courses). Participates in creating a teaching laboratory; has delivered 8 hours of lectures in English to students, PhD students, interns and teachers at the Veterinary Faculty of the University of Córdoba, Spain; member of a working group for the preparation of a project for program accreditation of a specialty from the regulated professions 6.4. Veterinary medicine at the Faculty of Veterinary Medicine of the University of Forestry - Sofia for "Master" degree regular form of education. Actively works with students and PhD students on several projects and 5 scientific forums.

Given the above and many years of experience, I believe that Chief Assistant Professor Georgi Malinov Stoimenov, Ph.D., is a well-prepared and experienced teacher.

### **4. Evaluation of research, research & development and teaching activities of the candidate.**



#### **4.1. Participation in research, research & development and educational projects.**

Chief Assistant Professor Stoimenov has participated in an impressive number of projects, of which: 6 research projects and 5 educational projects. Two of them were financed by University of Forestry, one - by Ministry of education and Science, 5 - by EU programs, as well as 3 international projects. Of the international ones, two projects with the International Atomic Energy Agency stand out, and in both projects the candidate has implemented consulting activities (3 months in Seibersdorf, Austria) and specialization (1 month in Zagreb, Croatia), both related to his scientific work in the field of the diagnosis of infectious diseases in animals, in particular molecular biological methods for diagnosis. Also, a part of the equipment of the laboratory for the diagnosis of infectious diseases is financed with funds from the project "Technical Cooperation, Bulgaria 5017. Enhancing the National Diagnostic Capabilities for Detection of Hepatitis E Virus in Pigs and Pig Products" also makes an impression.

#### **4.2. Analysis of published research works.**

In the current competition, the candidate participates with **25 scientific works**, of which 1 independent monograph, 1 book published on the basis of the dissertation work, 1 textbook published in a virtual library, 22 articles printed in scientific journals. Of which in journals with **impact factor -5**; in foreign journals refereed outside Web of science and Scopus-**3**; in Bulgarian refereed in Web of science and Scopus-**9**; in Bulgarian refereed outside Web of science and Scopus-**5**. In total, the articles in foreign journals are 8; articles in national magazines – 13; reports in works of international and national scientific forums-1. Of the 25 scientific works presented, 17 are in a foreign language, and 8 are in Bulgarian. The diversity of publications is impressive, some of them being in prestigious international journals such as: Avian diseases, Journal of Veterinary Research, Journal of the Hellenic Veterinary Medical Society, Veterinární medicína.

The total IF of the submitted publications with the candidate's participation, according to the reference submitted by him, is **3.324**, and the total SJR is **1.864**.

#### **4.3. Impact of applicant's research activities (citations).**

The total number of cited scientific works of the candidate is 11, and the total number of citations is 21. Of them, citations in articles with impact factor (**IF**) are **7**, citations in articles with impact rank (**SJR**)-**3**, citations in international journals **without** IF and SJR-**9**, citations in monographs, books and collective volumes-2. The **total IF** of the journals in which the articles are cited is **27.898**, and the total SJR of the journals in which the articles are cited is **8.876**.

#### **4.4. Contributions in research works of the candidate.**

The scientific work of Ch. Assistant Professor Georgi Stoimenov can generally be classified in



the following areas:

- Contributions to the field of infectious pathology in birds.
- Contributions to the field of infectious pathology in small ruminants.
- Contributions to the field of swine infectious pathology.
- Contributions to the field of vector-borne diseases.
- Contributions related to the study of hematological and biochemical parameters of blood in large ruminants.

The main contributions resulting from the publications submitted for participation in the competition of chief Associate Professor Georgi Stoimenov are in the field of infectious pathology in birds, in particular in two highly contagious viral diseases, one of which has a zoonotic potential. An analysis of the recent outbreaks of Newcastle disease in birds in Bulgaria was made. After isolation and molecular biological subtyping and pathotyping, then sequencing, the predominant genotype was established. With the help of molecular epidemiology, an analysis was made of the route of entry and movement of the virus in Bulgaria through migratory wild birds (2). The clinical signs, pathological changes and spread of viral antigen in different tissues and organs were studied by immunohistochemistry, in natural infection with HPAI H5N8 in pheasants. The possible routes for entering the country and the role of hunting farms for wild birds in the spread of this highly pathogenic virus have also been analyzed (3). The clinical signs and pathological changes of natural infection with HPAI H5N8 in different age groups of ducks used for foie gras production were studied. The role of this bird species as a reservoir of infection and the importance of improving biosecurity measures in mallard farms have been confirmed (4). For the first time in Bulgaria, HPAIV H5N1 was isolated and analyzed in Dalmatian pelicans. The clinical symptoms and histopathological changes in this bird species during natural infection with the virus have been studied (5). The first outbreak of HPAI H5N1 in poultry in Bulgaria is described. HPAIV H5N1 was isolated, subtyped and pathotyped using classical and molecular biological methods. Clinical signs and histopathological changes as a result of virus infection in domestic hens were studied. An immunohistochemical analysis was also performed in order to clarify the target tissues and organs of the specific virus in hen birds. A phylogenetic analysis was also carried out in order to establish the way of movement and entry of the virus in Bulgaria and especially in the affected farm (6). An outbreak analysis of HPAI H5N1 in Dalmatian pelicans in the Srebarna Biosphere Reserve was performed. The isolated viruses were sequenced, a phylogenetic analysis was performed, in which the relationship of the subtype to the viruses isolated in Bulgaria and Romania in the same year was confirmed (9).

The Bulgarian experience in field and laboratory diagnosis of HPAI H5N8 is presented. The clinical signs and pathological changes in HPAI H5N8 infection in different species of domestic and wild birds were analyzed. Adapted and implemented for routine diagnosis in the national reference



laboratory for Influenza A and Newcastle disease is rRT-PCR for detection of H5N8 (14, 22). The genetic evolution and origin of highly pathogenic avian influenza A of serotypes H5N2 and H5N8 in Asia, Europe and North America has been analyzed (20). A comprehensive analysis of the feasibility of using DNA barcoding to monitor influenza A viruses in wild migratory bird habitats has been performed (21). The diagnostic possibilities of different serological tests for the detection of antibodies against the Influenza A viruses in wild birds from different samples (serum; yolk) were evaluated. The correct approach to obtain consistent results requires that samples to be tested with several different laboratory tests (16). The other main direction and the scientific contributions resulting from it are studies related to clarifying the etiology of inflammation of the mammary gland in sheep and goats. Studies in goats are related to studies on mastitis. Intracisternal treatment was carried out and a prophylactic effect after antibiotic treatment during the dry period was reported, and the application of a selective and non-selective approach of antibiotic administration led to a reduction in the spread and manifestation of mastitis and a reduction in somatic cells count after parturition (10). In another material, the diagnostic methods for detection of subclinical mastitis were analyzed (15) and hematological changes in erythrocytes (RBC), hemoglobin (Hb), hematocrit (MCH), mean cellular concentration of hemoglobin (MCHC), the distribution of red blood cells (RDW), white blood cells (WBC) in lactating goats with subclinical mastitis are described. The main changes are related to white blood cell levels (17).

A study was carried out on the microbiological status in the mammary gland of Lacon sheep. Microorganisms were isolated in 53.4% of them, which were in different combinations or alone. They were identified as staphylococci (*S. Hylosus*, *S. Epidermidis*) and non-pathogenic streptococci (*Lactococcus lactis* ssp. *lactis*). The sensitivity of the isolated bacteria to antibiotics of different groups was established (12). In another study, a molecular biological method was applied to isolated DNA of 2 species of helminths from sheep - *Haemonchus* (Nematoda, Trichostrongilidae) and *Fasciola* river (Trematoda, Fasciolidae) in order to amplify species-specific fragments with the possibility of species identification (19).

## **5. Evaluation of the personal contribution of the applicant.**

He has a leading contribution in works in which he is the first leading author. For collective works, I assume that the candidate has also a contribution regardless of the place in authors' list. This conclusion is substantiated by the integral nature of the studies, outlining the scientific profile of the candidate.

## **6. Critical notes and recommendations.**



I don't have critical notes. My recommendations are that Dr. Stoimenov should publish his scientific results in more journals with an impact factor.

### **7. Personal impressions.**

I have known Dr. Stoimenov since he was a student. He was an inquiring student. Nowadays as a teacher, I can claim that he is respected by colleagues and students.

### **8. Conclusion**

Based on the overall assessment of the research and teaching activities, as well as the fulfillment of the national minimum requirements and the requirements laid down in the Regulations for the Development of the Academic Staff at the Forestry University, my opinion is **positive**. **I suggest the candidate Chief assistant professor Georgi Malinov Stoimenov, PhD to confer the academic rang "Associate professor" in discipline „Infectious diseases (Diseases in productive animals, Diseases in Equines, Diseases in companion animals) “ from professional field 6.4.Veterinary medicine. Scientific specialty „Epizootiology, infectious diseases and prevention of infectious diseases of animals“**

16.03.2023

Undersigned:



/Prof. V. Manov, PhD /