ОВМ 7402 # 11
9.04.20

Standpoint

by Prof. Ivan Dinev Ivanov, Department of General and Clinical Pathology, Faculty of Veterinary Medicine, Thrakia University, Stara Zagora

Member of the Scientific Jury based on Order №3ПС-27/27.01.2020 of the Rector of University of Forestry, Sofia, regarding participation in:

Contest for occupation of the academic position "Associate Professor" in scientific specialty "Epizootology, Infectious Diseases and Prevention of Infectious Diseases in Animals", from the Department of "Infectious pathology, hygiene, technology and control of food of animal origin" of University of Forestry", higher education 6. Agricultural sciences and veterinary medicine, professional field 6.4. Veterinary medicine, published in the State Gazette, issue. 101 of 27.12.2019 and procedure code: VM-AsP-1119-30.

The candidate in the announced competition is Ch. assistant professor Roman Pepovich Petkov from the Department of "Infectious Pathology, Hygiene, Technology and Control of Foods of Animal Origin" at the Faculty of Veterinary Medicine at the University of Forestry, Sofia.

• **Short biographical data.** Roman Pepovich Petkov was born on 11. 08. 1978 in Krasnodar, Russian Federation. He completed his secondary education in the town of Lovech, in the School of Mechanical and Electrical Engineering. He received his higher education in 2005 at Thrakia University, Stara Zagora, majoring in Veterinary Medicine. After successfully passing the competition exam in 2007, Dr. Pepovic began working as a full-time assistant in the Department of "Infectious Pathology, Hygiene, Technology and Control of Foods of Animal Origin", at the Faculty of Veterinary Medicine at the University of Forestry, Sofia. He continued his professional development as Senior Assistant (2010) and Chief Assistant (2014). In 2013 he was enrolled in a doctoral program of self-study under the doctoral program "Epizootology, infectious diseases and prevention of infectious animal diseases", professional field "Veterinary medicine". In 2015, successfully defended her thesis on "Dissemination, diagnosis and control measures of enzootic pneumonia in industrial pig breeding" and received the Doctor's degree on veterinary medicine. Dr. Pepovic's biography is supplemented by additional training courses and specializations in molecular biology,

specialized English and Russian with a B1/C1 levels of qualification and participation in National Assessment and Accreditation Agency expert groups for the evaluation of higher education institutions and scientific organizations.

• **Description of the materials for the competition**. According to the rules for the development of the academic staff of the University of Forestry, Sofia, the documents and materials I received for preparing my opinion fully comply with the requirements. Dr. Pepovic submits a list and copies of materials proving the presence of a total of 42 scientific publications for participation in the announced competition. He is also the author of a dissertation and participates individually or in co-authorship in the publication of textbooks, monographs and books. The latter include a published book based on a thesis, a monograph, a veterinarian's guide, and an electronic course for veterinary students based on the Blackboard LearnTM platform at the University of Forestry. Of course, all the normative documents are also attached to the set of materials as required (diplomas for higher education, for a scientific degree, information on pedagogical and teaching-teaching activity, etc.).

• **General characteristics of the applicant's activities.**

Research activity. The scientific publications presented by the applicant for the competition are the result of his creative activity during the period 2007-2019. Most of them (**n = 29**) were published in scientific journals. Of these in Impact Journales - **6**; in foreign abstracts in Web of Science and Scopus - **6**; in foreign abstracts outside Web of Science and Scopus - **8**; in Bulgarian abstracts in Web of Science and Scopus - **3**; in Bulgarian abstracted outside Web of Science and Scopus - **6**. The rest of the papers presented (**n = 13**) were published in collections of scientific forums, of which international - **7** and national - **6**.

The main scientific contributions stemming from the papers submitted for the competition by Dr. Pepovic are **in the field of infectious pathology in pigs**. A scheme for the control of ileitis in pigs reared in industrial pig production has been developed and tested [36]. Clinical features and pathologic changes in swine circovirus infection have been studied [37]. An assessment has been made of the applied classical and modern methods for the diagnosis of classical swine fever and the analysis of the facts and circumstances that hinder the eradication of the disease [27, 28]. In view of increasing antibiotic resistance, a comprehensive review and analysis of the potentially effective antibiotic agents against *Mycoplasma hyopneumoniae*, the optimal doses, routes of administration and recommended courses of therapy and metaphylactics of enzootic pneumonia in pigs have been made [34]. Clinical studies have been conducted in industrial pig farms on the efficacy of various

combination and monovaxins against enzootic pneumonia in pigs. The good prophylactic effect of vaccination was found to be in improving the clinical condition and reducing damage in the lungs of pigs, as well as achieving better production results (higher average daily growth, lower morbidity and mortality), [1, 12, 33]. As a result of comprehensive studies in 10 pig holdings, the prevalence and relative share of enzootic pneumonia in the respiratory disease complex in pigs (PRDC) have been established [32]. Secondary bacterial pathogens have been identified in nasal and lung samples from different age groups of pigs affected by respiratory infection with *M. hyopneumoniae* and *A. pleuropneumoniae*, with the majority of bacterial isolates showing high levels of tetracycline resistance [19]. A comparative study of the therapeutic potential of enrofloxacin and florfenicol in industrial pig farms in Bulgaria was conducted in pigs infected with *Mycoplasma hyopneumoniae*. The results showed a high therapeutic effect in pigs treated with enrofloxacin - 89.6% and respectively with florfenicol - 75.6%, representing the two antibiotics as equivalent in the treatment of enzootic pneumonia [20]. The extent and severity of pathomorphological lesions in the lungs of pigs naturally infected with *Mycoplasma hyopneumoniae* were evaluated and analyzed. Macroscopic changes characteristic of enzootic pneumonia were found postmortem in 64% of cases. Changes in 40.4% are specific for monoinfection with M. hyopneumoniae and in 59.6% changes are specific for co-infection between *M. hyopneumoniae* and *A. pleuropneumoniae*. It has been reported to be moderately affected by the lungs [3]. For the first time in Bulgaria, hepatitis E virus infection has been detected in domestic pigs raised on industrial farms from different regions of the country. Our studies have shown that HEV is widespread in industrial pig farms in Bulgaria with high seroprevalence. The results found that HEV seropositivity showed age dependence. Breeding sows are most affected by HEV, while juvenile pigs are least affected [6, 10, 13]. The methods for the diagnosis of enzootic pneumonia have been reviewed and analyzed. Depending on the stage of the disease and the type of samples tested, various laboratory tests are found, which are characterized by their sensitivity and specificity, on the basis of which accurate diagnosis can be made [14].

Another group of publications with which Dr. Pepovic applied for habilitation is related to **infectious pathology of pet animals** [30, 26 and 35]. An important contribution is the evaluation of the diagnostic capabilities of various serological tests for detection of antibodies against Influenza A virus in wild migratory birds [24]. An important point in the applicant's work is the contributions resulting from publications **in the field of vector-transmitted infections** [41, 42, 9 and 11].

Dr. Pepovic's wide-ranging research work is complemented by contributions from publications **in the field of pathology in small ruminants** [15,18, 21, 25, 38 and 40], as well as **infectious pathology in humans** [5 and 7].

Teaching activities. Dr. Pepovic's direct responsibilities are related to the delivery of a lecture course and practical training in the disciplines "Infectious diseases (common, diseases of productive animals, diseases of equidae, animal diseases for a company)", "Epidemiology and preventive veterinary medicine", "Virology" and employment at the Mobile clinic. It is worth noting that Dr. Pepovic leads the same classes in English-language students. Reference is made to the required annual audit engagement. He is also the author of curricula on "Virology" and "Bee, Fish and Game diseases" in Bulgarian and English.

Reflection of the candidate's scientific work in literature. From the submitted references for scientometric indicators it is clear that from the publication activity the applicant received a total Impact factor (IF) of **9,677** and an Scientific Journal Rankings (SJR) of **5,970** from 14 scientific works, 7 of which were published in international publications and 7 in Bulgarian. In 5 of the publications related to the competition, he is a freelance author and in the rest he has a team of two or more co-authors. Dr. Pepovic presents a list of a total of 15 citations from 11 of his scientific works, of which in Impact Journales: 2; with SJR: 5; international journals without IF: 7 and in monographs: 1.

• **Some notes.** Given the field in which Dr Pepovich works, and especially the challenges of our daily lives in this regard, and the working environment to date, which offer promising opportunities and from which interesting scientific developments may arise, I would only allow myself to wishes for more and more success.

• **Personal impressions.** I do not know the applicant personally, but the information provided in relation to the required indicators for participation in a competition for academic position determines the characteristics of a disciplined and professionally responsible colleague.

• **Conclusion**. Analyzing the research and teaching activity on the basis of presented scientific productivity, reports on reflection of contributions from the publication activity and academic employment of the applicant, I believe that they fully meet the requirements of the law for the development of the academic staff in the Republic of Bulgaria, the rules for its

application and the criteria of the Faculty of Veterinary Medicine at the University of Forestry, Sofia for the acquisition of the corresponding position under this competition.

Against this background, I propose that the Honorable Members of the Scientific Jury support my opinion and join my proposal before the Faculty Council for the award of the academic title "Associate Professor" in "Epizootology, Infectious Diseases and Prevention of Infectious Diseases in Animals", of Ch. assistant professor Roman Pepovich Petkov from the Department of "Infectious pathology, hygiene, technology and control of foods of animal origin" at the Faculty of Veterinary Medicine at the University of Forestry, Sofia.

07. 04. 2020.

Prof. I. Dinev: