

## STANDPOINT

3BM 7402 #17  
5.05.20

On the application in a competition for the academic rank “Associate Professor”, higher education field 6.0 „Agrarian Sciences and Veterinary Medicine“, professional field 6.4 „Veterinary Medicine“, scientific specialty “**Epizootiology, infectious diseases and prevention of infection diseases of animals**”, scientific discipline “Infectious diseases (general part, diseases on farm animals, diseases on equids, diseases on companion animals)” announced by the University of Forestry – Sofia in State Gazette issue 101 of 27 December 2019, procedure code VM-AsP-1119-30.

**Applicant in the competition: Assistant Professor Roman Pepovich Petkov, DVM, PhD**

**Standpoint author: Professor Maria Yordanova Andonova DSc** - professional field 6.4 „Veterinary Medicine“, scientific specialty “Animal Pathology”, Trakia University, Faculty of Veterinary Medicine – Stara Zagora

### **1. Short biography of the candidate**

Chief Assistant Professor **Dr. Roman Pepovich Petkov** is born in 1978. He graduated as Master in Veterinary Medicine in 2005, and in the period 2005-2007 has worked as junior expert in the Regional Veterinary Service, Lovech. Since 2007 he works in the Veterinary Medical Faculty to the University of Forestry, Sofia as Assistant Professor, Senior Assistant Professor and Chief Assistant Professor performing training in Bulgarian and English with students for the following courses: “Infectious diseases (general part, diseases on farm animals, diseases on equids, diseases on companion animals)”, “Epidemiology and preventive veterinary medicine”, and “Virology”. He performs training in “Mobile clinic” and participates in training of post-graduate students, being tutor of two of them. In 2015 was conferred PhD educational and academic degree after defending a thesis “Incidence, diagnostics and measures for control of porcine enzootic pneumonia in industrial production systems” in professional field 6.4. „Veterinary Medicine“, scientific specialty “Epizootiology, infectious diseases and prevention of infection diseases of animals”. The candidate gave lectures in the Faculty of Veterinary Medicine to the University of Sassari, Italy. Member of the Faculty Council, of the General Assembly of the University of Forestry, of standing and temporary committees, participates in creation of teaching labs and centres. Author of e-learning module for training undergraduate students in veterinary medicine based in the Blackboard Learn<sup>TM</sup> platform, University of Forestry. He has passes several training courses related to communication skills and work in a team, information technologies, academic training, project management, etc. Provides consultation services in the field of porcine infectious diseases and expertise as a member of specialised committees.

### **2. General description of presented materials in line with the requirements of the Statute for Development of the Academic Staff (SDAS) of the University of Forestry**

Chief Assistant Professor Dr Roman Pepovich has provided a complete set of 22 documents as per SDAS of the University of Forestry, 3 pieces on paper and the other – on

electronic media (CD). All materials are accurately prepared and each fact sheet is supported with evidence.

In his application for the competition, the applicant presents **47 scientific works** after conferral of the PhD degree. They include: **1 monograph from 2020** „Prevention and control of infectious animals diseases ISBN 978-619-7554-06-9; **1 book from 2019** on the basis of defended PhD thesis entitled „Porcine enzootic pneumonia – prevalence, diagnostics and measures for control” ISBN 978-619-7554-01-4; **1 e-textbook from 2013** „Epidemiology and preventive medicine (epizootiology)“ <http://elearn.ltu.bg/>; **2014** „Handbook of the veterinarian“ ISBN 978-954-2910-43-5; **2012** „Manual for the veterinary practitioner starting an own private business“ ISBN 978-954-2910-15-2; **6 publications with IF=9.677; 8 publications with SJR; 15 publications without IF and SJR; 13 publications in proceedings from scientific forums.** Independent works are 5; with two co-authors: 2, and the other 40 – with 3 or more co-authors. The applicant present **15 citations**, and the reference to Scopus indicates a personal h index=2.

The presented fact sheet shows that the applicant meets minimum required points by groups of parameters according to SDAS of the University of Forestry in higher education field 6.0 „Agrarian Sciences and Veterinary Medicine“, professional field 6.4 „Veterinary Medicine“ as follows below:

**Group of parameters A:** Dissertation for conferral of PhD educational and scientific degree, defended in 2015 – **50 points**;

**Group of parameters B:** Contains articles equivalent to a monograph (100 points). This group has a score of **101.07 points**;

**Group of parameters Г:** The score for this group exceeds the required one (200 points) and is **258.72 points**, received from inclusion of a monograph which is not presented as primary habilitation work (100 p.); book published on the basis of PhD thesis (40 p.); articles in periodicals refereed and indexed in world databases with scientific information (67.28 p.) and articles in non-refereed peer-reviewed journals (51.44 p.).

**Group of parameters Д:** In this group, I accept the presented **150 points**, which far exceed the requirement of 50 points for Associate Professor and are from 15 citations – 7 in journals refereed and indexed in world databases; 7 in monographs and peer-reviewed collective volumes and 1 in and non-refereed peer-reviewed journal.

**Group of parameters E:** This group of parameters is not required for Associate Professor, yet the applicant has presented **151.63 points** from participations in national scientific or educational projects and a published university teaching aid.

**To sum up, the candidate has a total score for all groups of parameters of 711.42 vs the required score of 400 points.**

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

The materials to the application in the competition demonstrate that by January 2020 the candidate's teaching experience in the University of Forestry is 12 years and 10 months. He is involved in the training of students in Bulgarian and English and his course load for the different courses in the curriculum is: “Infectious diseases (general part, diseases on farm animals, diseases on equids, diseases on companion animals)” - 90 hours lectures and 90 hours practical training; “Epidemiology and preventive veterinary medicine” – 30 hours lectures and 30 hours practical training; „Virology“ 30 hours practical training; „Mobile clinic“ –30 hours practical training.

The applicant is the author of curricula of courses „Virology" and "Diseases of bees, fish and game", the latter in Bulgarian and English for third-year students with course load of 45 h lectures and 45 h practical training. He gives 4 lectures to undergraduate students, PhD students, post-graduate students and instructors in the FVM, University of Sassari, Italy. Author of the e-module for training undergraduate students in veterinary medicine "Epidemiology and preventive medicine"

The analysis of presented materials regarding the teaching & learning activities of the applicant allowed me concluding that Dr. Roman Pepovich is a meticulous, demanding and ambitious instructor with rich experience and commitment to innovative approaches that he applies to the training of veterinary students.

#### **4. Evaluation of research, research & development and publication activities**

Publications correspond to specific competence and scientific interests regarding the competition. The scientific production of the applicant is aimed at prevention and control of infectious diseases in animals and men. A mathematical model for development of a specific infectious disease aimed at prediction of its evolvement into epizootic as well as possibility for control through vaccination is presented to assist the selection of strategy for disease control (31).

An emphasis in the research activities of the candidate is placed on manifestations of porcine respiratory disease complex, in whose etiology *Mycoplasma hyopneumoniae* plays an important part (32). This pathogen causing porcine enzootic pneumonia causes big economic losses to pig farming in Bulgaria and worldwide, manifested with high morbidity, poor feed conversion, reduced daily weight gain, costs for therapy and prophylaxis (1,3,12,14,20,32,33,34,43). The main contributions of Dr. Pepovich include: 1. Critical overview and analysis of methods for diagnostics of porcine enzootic pneumonia and evidence for the need of integral approach combining clinical signs and lung lesions with laboratory results; 2. Performance of studies in industrial pig farms with different combined and mono vaccines and demonstration that vaccinations had a good preventive effect expressed with improvement of the clinical status, reduction of pulmonary lesions of pigs and better production results (1,12,33); 3. Identification of secondary bacterial pathogens in pigs affected with respiratory infection (19); 4. Test on the therapeutic potential of enrofloxacin and florfenicol in pigs with *Mycoplasma* infection and confirming 89.6% therapeutic effect of enrofloxacin and 75.6% of florfenicol, indicating that both antibiotics could be used in the scheme for porcine enzootic pneumonia control (20); 5. The book „Porcine enzootic pneumonia – prevalence, diagnostics and measures for control" published in 2019 provides evidence for extensive experience in this research field (43).

Viral infections in animals and men are the other primary direction in the research of Dr. Roman Pepovich (2,5,6,7,8,10,13,24,27,28,30,37), making the following contributions: 1. A systematic analysis of epidemiology, etiology, clinical signs, diagnostics, therapy and prevention of hepatitis A (5), hepatitis B (7), hepatitis E (2,8) was performed; 2. It was proved that hepatitis E is an emerging zoonosis and important health and veterinary problem. In pigs, the infection is subclinical, but sows are a main reservoir – the total seroprevalence in sows is 93.3% (13); 3. The clinical signs, forms and pathomorphological lesions in circovirus disease in pigs are discussed (37); 4. The different methods for eradication of classical swine fever

(27) and extension of diagnostics of its atypical forms (28) are presented; 5. The application of real-time PCR molecular method for diagnostics of canine parvovirus type 2 was evaluated (30); 6. Diagnostic possibilities of various serological tests for detection of antibodies against *Influenza D virus* are discussed, recommending the application of several laboratory tests (24).

The third main research field is associated with bacterial infections in animals, with preponderance of studies on mastitis in goats – risk factors influencing their prevalence; identification of mastitis microbial pathogens; their antimicrobial therapy (15,16,18,21,25,38,40). Also, main etiological agents from family *Rickettsiaceae* and therapeutic means applied for control of rickettsioses are analysed (41,42). An in-depth analysis on Lyme borreliosis was made with respect to clinical variability of the disease, diversity of vectors and reservoirs, applied therapeutic means and prevention measures (9). The effect of Q fever agent was investigated (11). A scheme for control of ileitis in pigs was presented (36).

Some of publications of the applicant refer to *in ovo* models as a novel alternative of laboratory animals used in experiments (4,17,22,23). The importance of avian embryos as an inexpensive and reliable system for study of carcinogenic effect of various toxic substances is analysed.

Moreover, some publications are devoted to study on the prevalence of anaplasmosis among stray dogs in the district of Sofia (26). A case of hepatocellular carcinoma is described (35).

An objective reflection of research merits and international popularity of the candidate for “Associate Professor” are the 15 citations, out of which 7 in Web of Science, Scopus, 7 in non-refereed peer-reviewed journals and 1 in a teaching aid. Self-citations were not detected in the presented fact sheet for citations.

The participation of Chief Assistant Professor Pepovich in research teams of 10 projects (research projects - 3 to RDS of UF; 1 to FVM of the Trakia University, 1 investment and 5 educational projects) confirms that he is a sought-after specialist with communication and team-working skills. Furthermore, he has participated in 22 scientific forums – 9 national and 13 international and was part of organizing committees of 4 of them.

#### **Critical notes and recommendations**


1. In my opinion, SCImago journal rank (SJR) of publications **should be 1.457, instead of 5.970 indicated by the applicant**; it is not correct publications having both IF and SJR and whose impact factor was used for IF score, to be included once again in the calculation of SJR;
2. I do not consider that presented „Handbook of the veterinarian“ and „Manual for the veterinary practitioner starting an own private business“ are written and prepared in line with requirements for a teaching aid, whose volume is usually compliant with course hours of the specific course, so I do not accept them as teaching aids.
3. I believe that the abstract of the PhD thesis for conferral of the PhD educational and scientific degree should not be listed as separate work – it is part of the dissertation and should be number with an index, e.g. 1A.

## 5. Conclusion

Having analysed both teaching/learning and research activities on the basis of presented research production, fact sheets for scientific contributions of the candidate, professional skills for laboratory and diagnostic work, I deem that they are fully in line with the requirements for the academic rank "Associate Professor" stipulated by the Law on the Development of Academic Staff in the Republic of Bulgaria, rules for its application and the Statute for Development of Academic Staff at the University of Forestry. That is why I vote for conferral of the academic rank "Associate Professor" to the candidate Chief Assistant Professor Dr. Roman Pepovich Petkov, PhD in the scientific discipline "Infectious diseases (general part, diseases on farm animals, diseases on equids, diseases on companion animals) from professional field 6.4 „Veterinary Medicine“, scientific specialty **"Epizootiology, infectious diseases and prevention of infection diseases of animals"**.

Stara Zagora

30 April 2020

Undersigned:.....

/Prof. M. Andonova/