ФВМ 517 #22
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Standpoint

On the provided application materials for the competition
for the attainment of the academic position "**PROFESSOR**"
in higher education field 6 "Agricultural Sciences and Veterinary Medicine",
professional direction 6.4. "Veterinary medicine", scientific specialty of
"Animal Pathology", discipline "PATHOLOGY" (Specialized pathological anatomy),
which was announced by the University of Forestry - Sofia in the State Gazette, issue 32
of 3rd April 2020, procedure code VM-P-0320-35.

Competing candidates:

Associate professor Dr. Vasil Kostadinov MANOV, DVM,
professional field 6.4. "Veterinary medicine" at the University of Forestry – Sofia.

Standpoint author:

Professor Dr. Ilia Tsachev TSACHEV, DVM,
professional field 6.4. "Veterinary medicine" at Trakia University - Stara Zagora.

1. **Brief biography of the candidate.**

Vasil Kostadinov Manov graduated from the Faculty of Veterinary medicine at the Higher Institute of Zootechnics and Veterinary Medicine as a veterinarian in 1989. During his time at university he was a model student, his culminant accomplishment being the achievement of high scores on his exams. Immediately after graduating from university, Dr. Manov began his career as a veterinarian in the town of Byala Slatina. This lasted for a short period of time, after which he was accepted as an Assistant Professor in the Department of Pathological Anatomy at the Faculty of Veterinary medicine at the Higher Institute of Zootechnics and Veterinary Medicine. From the very beginning, he has shown remarkable diligence when providing both practical and theoretical education to the students in the disciplines of "General pathological morphology" and "Specialized pathological anatomy". From 1989 to 1996 he actively participated in research activities.

From 1996 onward he has been a part of the academic staff of the Faculty of Veterinary Medicine at the University of Forestry – Sofia where he was appointed as a Chief Assistant Professor.

In 2009 he completed his PhD dissertation on "Comparative pathomorphological research on animals infected with Bulgarian isolates of the virus causing Aujeszky's disease".

After being appointed to the rank of Associate Professor, he has completely immersed himself in delivering the lecture course to veterinary students at the Faculty and conducting the examinations.

2. Consonance between the provided documentation and application materials of the candidate/s and the requirements of the Statute for Development of the Academic Staff (SDAS) of the University of Forestry – Sofia.

Associate Professor Dr. Vasil Kostadinov Manov has provided a full set of 22 documents as per the SDAS of the University of Forestry – Sofia, of which 3 are on paper and the rest – on electronic devices (USB flash drive). In accordance with the provided reference, the candidate possesses the minimum amount of points for each criterion listed in the SDAS of the University of Forestry – Sofia, higher

education field 6. "Agraricultural Sciences and Veterinary Medicine", professional field 6.4. "Veterinary medicine".

- *Group of parameters А*: Dissertation for the conferral of a PhD educational and scientific degree – 50 points.
- *Group of parameters Б*: Monograph – 100 points.
- *Group of parameters Г*: The score of the candidate is 245.63, which exceeds the established minimum of 200 points. This has been achieved by summating the 100 points attained from their monograph with the 81.53 from their articles and report papers, published in periodicals that have been refereed and indexed in international databases, and the 64.1 points from articles and report papers published in non-refereed peer-reviewed journals.
- *Group of parameters Д*: The total number of citations is 1 030, which exceeds the necessary minimum of 100 citations 10 times. Of these, 870 citations are in refereed and indexed international databases with scientific information and 160 are in non-refereed periodicals with scientific reviews.
- *Group of parameters Е*: The score of the candidate is 144.8, which exceeds the established minimum of 100 points. This has been achieved by summating the following: 20 points from mentoring a PhD student that successfully defended their dissertation; 30 points for participation in national scientific and educational projects; 80 points for publishing study books for the university's curriculum; 14.8 points for publishing supplementary materials for the university's curriculum.

- The candidate, Associate Professor Vasil Manov, has achieved a total of 1 570.43 points. This exceeds the established minimum of 550 points for the academic rank "Professor" three times.

3. Evaluation of the educational activity of the candidate.

Associate Professor Vasil Manov is part of the teaching staff in the Department of Internal Medicine, Pathology and Pharmacology at the Faculty of Veterinary Medicine at the University of Forestry – Sofia and lead lecturer of the disciplines "General pathomorphology" and "Specialized pathological anatomy". For the past five years his attention has been engrossed in academics in and outside of the auditory. During the academic year 2018-2019 alone he has presented 180 hours of lectures, 96 hours of practical training and 46 hours of training outside regular study hours. In addition, Associate Professor Manov has played a crucial role in establishing the pathohistological laboratory and the laboratory designated for preparation of macroscopic specimens, both of which have greatly benefited the Department's material base. He is the author of four curricula, author and co-author of nine study manuals used in the veterinary faculties in both Sofia and Stara Zagora.

- The candidate is a versed scholar and has earned the trust and love of several generations of students in both faculties.

4. Evaluation of the scientific, research and publishing activity of the candidate.

The candidate has provided 46 publications: 37 scientific articles, 2 monographs and 7 published books.

The articles, which have been assigned an impact factor, provide a total score of 12, while the rest have been published in 1 international periodical and 2 Bulgarian refereed journals. Of all the articles, 20 have been published in non-refereed journals – 17 in Bulgarian and 3 in international journals. Some

have been included in five compendiums from scientific forums; presented or published as resumes at 23 national scientific forums with international participation and at 1 international forum. Associate Professor Manov has provided 7 articles as the sole author, 2 with one co-author, 2 with two co-authors and 35 with three or more co-authors.

Total number of citations: 86, of which 54 are included in Scopus and Web of Science.
Final impact factor: 23.66

The scientific work of Associate Professor Manov can be divided into 4 distinct groups:

1. Research on the clinical presentation, pathologo-anatomical manifestation and differential diagnosis of infectious diseases and neoplasia.
2. Pathologo-anatomical and pharmacological research on plant samples.
3. Pathologo-anatomical research on intoxication with toxic and other substances.
4. Applied research topics.

"Research on the clinical presentation, pathologo-anatomical manifestation and differential diagnosis of infectious diseases and neoplasia" includes:

1. A 10-year-long study on the molecular and biological aspects of the parvovirus infection in carnivores in Bulgaria. It was thanks to this study that the first canine parvovirus infection was recorded in the country, the samples being from wild animals and domestic cats. [№4]
2. Foreign body pneumonia in a dog with purulent and necrotic inflammation of the lungs, caused by *Pseudomonas aeruginosa, Streptococcus pneumoniae* and *Candida albicans*. [№ 18]
3. Atypical pneumonia in cows imported from Austria. [№35]
4. Proving the etiological role of Porcine Circovirus 2 (PCV2) in the development of several diseases in Bulgaria: Porcine Multi-systemic Wasting Syndrome (PMWS), Porcine Dermatitis and Nephropathy Syndrome (PDNS), respiratory diseases and reproductive disorders. [№16; №20]
5. Histological, histochemical and electron microscopic findings in newborn piglets after inducing an infection with vaccinal strains and uterotropic strains of the *Pseudorabies virus*. [№. 31; №34]
6. Clinical and pathomorphological changes in vaccinal and wild strains of the *Suid herpesvirus 1* in dogs and cats. [№32]
7. A case of paratuberculosis in cattle with typical pathoanatomical findings and DNA presence of *Mycobacterium avium ssp. paratuberculosis*, established with conventional PCR. [№27]
8. Pathomorphological changes in preneoplastic locuses that develop into liver and pancreatic neoplasms in poults [№23], chicks [№ 6] and guineafowl [№29] treated with the carcinogens N-nitrosodimethylamine (NDMA) and N-nitrosodiethylamine (NDEA).
9. Liver spongiosis in Japanese quail embryos after the application of two chemical carcinogens (N-nitrosodimethylamine and N-nitrosodiethylamine). [№25]
10. Morphological and biochemical changes in blood samples from chicks, poults and guineafowl that have been treated at an early stage of their embryonic development with chemical carcinogens which are established inciters of paraneoplastic syndrome. [№ 6, 23, 29]
11. Proving the anaplastic epithelial origin of hepatocellular carcinoma through means of an immunohistochemical study with a polyclonal carcinoembryonic antigen and cytokeratin 7 [№19]
12. Proving the neuroendocrine origin of a tumor in a dancing bear. [№21]
13. Following the development of secondary sinusitis in a horse with radiography and computer tomography (CT). [№28]

Defining contributions are:

1. Proving the toxic and carcinogenic potential of N-nitrosodimethylamine (NDMA) and N-nitrosodiethylamine (NDEA) *in ovo* in poult embryos [№23] and Japanese quail [№25]; NDEA induced neoplastic lesions in the liver of chicks [№6].
2. Myxomas and oedema on the eyelids, lips, perineal region, outer ears and distal limbs of rabbits, caused by wild isolates of *Leporipox virus*. [№17]

"Pathologo-anatomical and pharmacological research on plant samples" includes the following originals [№1-3, 5, 8-13, 15, 33]:

1. The first series of *in vitro/in vivo* studies on the protective qualities of filtered extracts, saponin mixtures and biologically active compounds of *Gypsophila trichotoma* Wend, three species of the genus *Astragalus* L. and *Ruscus aculeatus* L.
2. Pathologo-anatomical evaluation of the type and degree of impact on different organs.
3. A histopathological study on the liver after treatment with plant samples and the observed protective effects.

"Pathologo-anatomical research on intoxication with toxic and other substances" includes:

1. Evaluation of the frequency of contact sensitization to formaldehyde after exposition among veterinary medicine students, veterinarians, dental medicine students and trainees, dental medicine specialists and involved non-professionals. [№7] – original contribution.
2. Establishing *Clostridium botulinum* among snakes (*Coluber caspius*) [№30] – confirmatory contribution.
3. Clinical and pathomorphological findings in horses poisoned with European yew (*Taxus baccata*) [№36] – confirmatory contribution.
4. Morphological characteristics of the ovaries of water buffalo (*Bubalus bubalis*) in the early postadolescent period. [№14] – confirmatory contribution.
5. Cases of portosystemic shunt in dogs [№24] – confirmatory contribution.

"Applied research topics" include:

1. Differential diagnosis scheme with regard to clinical signs and macroscopic changes in cases of abortion and dead newborns with an infectious etiology in swine (Classical swine fever, Aujeszky's disease, reproductive and respiratory disorders, Parvovirosis in swine, brucellosis, leptospirosis, listeriosis and chlamydiosis) – complimentary contribution.
2. Studying the hepatocarcinogenicity of chemical compounds in bird embryos [№6, 23, 25, 29] – a valuable model system for experimental research on cancer. Different models of intoxication *in vitro* and *in vivo* focused on discovering protective and antioxidant qualities of new biologically active compounds in animals and humans [№1-3, 7-8, 10-13, 15, 33] – complimentary contribution.
3. *In silico* protocol for early approximation of the potential antidiabetic activity of saponins from *A. glycyphylloides*. [№10] – complimentary contribution.
4. Pharmacological and pathologo-anatomical studies with biologically active compounds of plant origin – a precondition for the development of phytoproducts and their use in human and veterinary medicine. [№1-3, 5, 8-13, 15, 33] – complimentary contribution.

Associate Professor Vasil Manov is the author of two monographs. The first, titled "Specialized veterinary pathology", describes pathological processes and morphological changes that are of interest to the modern veterinary practice, illustrated with numerous original photographs and supported with scientific publications by the author. The second – "Morphological characteristics of some neoplasms in animals" – systematically displays the most recent data on the morphology of the most common

oncological diseases in animals, accompanied by the author's extensive knowledge from their personal experience as a practicing clinician.

Both study books – "General veterinary pathology" and "Pathologo-anatomical characteristics of diseases in domestic animals" – and both manuals – "Veterinary necropsy techniques and working with rendering facilities" and "Veterinary histopathology", the latter of which has been translated into English – have defined Associate Professor Manov as a renowned scientist and pedagogue.

5. Evaluation of the personal contribution of the candidate.

- I am confident in the outstanding personal contribution of the candidate, which is accounted for by the entirety of their scientific, pedagogic, research and communal activity.

6. Critique and recommendations.

- Recommendation: May Associate Professor Manov maintain his academic spirit and artistic nature and continue implementing scientific and pedagogic notions in his everyday environment.

7. Personal impressions.

- Ever since his appointment as an Assistant Professor in 1990, he has been the only Assistant Professor from another department to have attended my classes on Infectious Diseases multiple times with the goal of enriching and modernizing his professional library.

8. Conclusion.

I give my **approval** of the candidate Associate Professor **Dr. Vasil Kostadinov Manov** to attain the academic position **"Professor"**. A mentor and scientist of high astute, remarkable veterinary clinician and an experienced expert, he is a colleague of good repute and honored in both the Faculty of Veterinary medicine and the University of Forestry – Sofia as a whole.

Undersigned:.. ....

Prof. Ilia Tsachev, DSc

This standpoint is presented on: 29 July 2020