

# Scientific Opinion

from

assoc. prof. Yuri Penkov Nyagolov, MD, PhD

In charge of sector „Physiology“ at the department of Physiology and Pathophysiology;  
Medical University-Sofia

Concerning the **PhD thesis** entitled: **Dog's communication signals presented in soundgrams in different behavioral reactions**

Scientific speciality „Human and Animal Physiology“

**Author:** Pavlina Ivanova Hristova

**Form of the PhD & location:** Individual (free study) department Anatomy, Physiology and Stockbreeding sciences, Faculty of Veterinary Medicine, Forestry University-Sofia.

**Scientific consultant:** Assoc. prof. Violeta Gerasimova Alexandrova, PhD, DVetMed

Pavlina Ivanova Hristova is a graduate of the department of Anatomy, Physiology and Stockbreeding sciences, Faculty of Veterinary Medicine, Forestry University-Sofia with average score from the whole course of study 5.10 and average score from the State exams- 5.00.

Three articles published related to the PhD thesis have been presented, one of which as individual author. All publications are in one journal (TRADITION AND MODERNITY IN VETERINARY MEDICINE).

## **Actuality of the study.**

The study presented is focused at a significant and substantial problem. Its successful realization and possible additional expansion might considerably increase the scientific knowledge and somehow elucidate in theory and practice the mechanisms of inter- and intra-species communication.

## **Knowledge of the problem.**

The scientific literature overview of the PhD student is based on deep analysis the basic aspects of the problem investigated, including both classical and contemporary approaches for the present. Literature cited enough completely covers the present available information on the topic. Impressive is the attempt for comparative analysis of structures (larynx) for different species and subspecies.

An approach of high value is the attempt of systematization of the basic conclusions of the review, the basic not completely defined issues and not thoroughly cleared facts.

The investigation is relatively well planned and data received are with high informative value applicable for a precise evaluation and analysis. The aim and the major tasks of the study have been formulated in accordance with the conclusions from the literature review provoked from deficiency of information and certain controversies.

The methods applied are contemporary and enough informative. The author is well acquainted with the methods and correctly interprets the results of the study.

The results received have either supporting or original value. Data analysis and their discussion illustrate deep knowledge of the problem, as well as capacity for analysis and formulation of conclusions.

**The discussion** is logically based and demonstrates the skill of the candidate to analyse the data and correctly to interpret and compare the results of other author working on the issue. The PhD student has cited 214 literature sources on the problem reflecting predominantly the knowledge on the theme from the last two decades. Based on literature date and the own results the author formulates 8 major conclusions. I would have recommended generalization and shortening of the conclusions. Three original and 2 supporting contributions have been formulated.

I agree with the formulated **contributions**

Highly impressive are the **recommendations for practice**.

The personal impression from the PhD student at the previous presentation, the detailed overview of the documents and materials presented allow me to appreciate highly the personal engagement of Hristova in planning, and fulfilling the experiments, analysis of the results and their publication. The PhD thesis includes scientific and applicable results fulfilling the requirements of the local legislation. My conclusion is that the PhD student Pavlina Christova possesses theoretical background and practical skills and competence in the scientific speciality "Human and animal physiology", demonstrating a capability to undergo individual scientific activity. This is why I am giving a **positive evaluation** of the presented investigation and declare to vote "YES" for acquirement of the educational and scientific grade "doctor" in doctors programme of "Human and animal physiology" for Pavlina Christova. My complete evaluation would be presented after the presentation and questions answered by the PhD student.

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Sofia

(assoc. prof. Yuri Nyagolov MD, PhD)