

STATEMENT

From assoc. prof Lyuba Dineva Miteva, PhD
Department of Molecular biology, Immunology and medical genetics
Medical Faculty, Trakia University, Stara Zagora, Bulgaria

Concerning PhD thesis

the field of higher education: 4. Natural sciences, mathematics and informatics,
professional field: 4.3. Biological Sciences.
scientific specialty: Medical Biology

Author of PhD thesis: Tsonka Slavova Dimitrova

Form of education: regular form of education, order № P-109-260 / 01.08.2019

Title: INVESTIGATIONS AND SCREENING METHODS FOR EARLY DIAGNOSIS OF PATIENTS WITH GASTROINTESTINAL DISORDERS BECAUSE OF MUSHROOM CONSUMPTION

Department: Department of Biology; Faculty of Pharmacy; Medical University of Varna " Prof. Paraskev Stoyanov"

Scientific Supervisors: Prof. biol. Dobri Lazarov Ivanov, PhD
Prof. Petko Penkov Marionov, MD, PhD

General comments of the procedure and author's personal data:

This statement has been prepared in the implementation of Order № P-109-334 / 06.08.2021. by the Rector of the Medical University - Varna "Prof. Dr. Paraskev Stoyanov "as a member of the Scientific Jury for Public Defense of the dissertation.

In 2000, Tsonka Slavova Dimitrova obtained a Master's degree in Biology with a specialization in Plant Biotechnology from Plovdiv University "Paisii Hilendarski". Since 2010, she holds an academic position "Assistant" at the Department of Biology, Faculty of Pharmacy, Medical University - Varna "Prof. Dr. Paraskev Stoyanov. In 2016 acquired the specialty of Medical Biology from the Medical University of Varna. Since 2019, she has been enrolled in a full-time Ph.D. program, a regular form of education in the doctoral program "Medical Biology" field of higher education 4. "Natural Sciences, Mathematics and Informatics" professional field 4.3. "Biological Sciences" to the same Department. In 2021, she obtained the right to defense in respect to the order № P-109-334 / 06.08.2021.

The submitted set of documents and materials on an electronic device is in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), and the

Rules for the Development of the Academic Staff at MU-Varna, for acquiring the scientific and educational degree "Ph.D."

Structure and evaluation of the PhD thesis

The dissertation (PhD thesis) by Tsonka Slavova Dimitrova covers 146 standard pages, including 71 figures, 17 tables, and 1 appendix. The PhD thesis is structured in the following sections: Title page (1 page), Contents (2 pages), List of abbreviations (1 page), Introduction (1 page), Literary review (40 pages), Purpose and tasks, working hypothesis (1 page), Materials and methods (9 pages), Own results (41 pages), Discussion (24 pages), Concluding remarks (1 page), Conclusions (1 page), Bibliography (19 pages), which contains 219 literary sources, 11 of which are in Bulgarian, 2 in Russian and the rest - in English. A good impression is made by the fact that over 120 of the used references have been published in the last 3 years. This section is followed by the section Contributions of the dissertation (1 page), and a list of publications related to the PhD thesis (1 page). As an appendix (3 pages), the used questionnaire comprises 27 questions is presented.

The PhD thesis of Tsonka Slavova Dimitrova is focused on research on intoxication with wild mushrooms, including a retrospective analysis of the documented case of mushroom poisoning for the period 1991-2015 in Varna; application of rapid tests for identification of amatoxins – Meixner's test in samples of gastric contents or in collected mushrooms, and ELISA test in urine samples; as well as a survey among the population of the Northern Black Sea coast concerning the knowledge and usages of wild mushrooms.

The introduction section makes a positive impression because ends with a critical assessment of the available information and outlines some problems in the field, valid for the world-wide community and for our country. Based on the literature review, the PhD aim is stated, supported by the respective tasks and working hypothesis. In the section Materials and methods, the procedure of the used competitive ELISA for the quantification of α - and γ -amanitin is described in too big detail. I find this superfluous, given that a commercially available ELISA kit was used. Such description would be necessary if a home-made ELISA was used. A translation of the manufacturer's instructions for the usage of the ELISA kit is unnecessary.

The obtained results, PhD student illustrated with tables and graphs in the "Results" section. The "Discussion" section is subdivided into 4 subsections, respectively: 6.1. Analysis of A. phalloides intoxications in 1991-2015; 6.2. Analysis of laboratory tests; 6.3. Analysis of the awareness about wild mushrooms and 6.4. Analysis of the use of wild mushrooms. Based on the results, 6 conclusions have been summarized, which correspond to the objectives. In addition, 3 original scientific-applied and 3 confirmatory contributions were drawn. I accept all conclusions and contributions.

Assessment of the publication activity

In relation to the PhD thesis, 4 original full text scientific articles are presented in 2 of which the Tsonka Slavova Dimitrova is the first author. Three of the articles are published in referenced and indexed journal with SJR without IF. Based on the documents, PhD student covers the minimum required 30 points in group of indicator "Γ" in the professional field 4.3. Biological sciences in accordance with the regulations for application of the Law for development of the academic staff and the respective one of MU-Varna.

Abstract of PhD thesis is designed according to the requirements and objectively reflects the contents of the dissertation. There are some technical inaccuracies in the printed copy of the abstract, e.g. in Figures 2, 4, 5.

Critical remarks, recommendations and questions

One of my critical remarks concerns the presentation of some results and their interpretation. There is no author's critical analysis of the obtained data in many places. Another remark in a purely technical aspect concerns the set of scanned documents and articles. I think it would be appropriate to name the files according to their content and all pages of the document to be in one common file. Also, there is a lack of information about the participation of the Ph.D. student in scientific forums, in research teams of scientific projects and programs. Although this type of information is not subject to evaluation by the scientific jury in the current procedure, it would be helpful to the impression of the Ph.D. student as a scientist.

Conclusion

The Tsonka Slavova Dimitrova's PhD thesis meets and fulfills the requirements according to the ZRASRB and the rules adopted by the MU-Varna for its implementation for obtaining the PhD degree. The topic and the content of the PhD thesis correspond to the announced professional direction 4.3. "Biological Sciences" and the doctoral program "Medical Biology". I positively appreciate Tsonka Slavova Dimitrova's PhD thesis.

All this gives me a reason to vote positively, as a member of the Scientific Jury, to award Tsonka Slavova Dimitrova a the educational and scientific degree PhD dergee in the field of high education 4. Natural Sciences, Mathematics and Informatics; Professional field 4.3. Biological sciences in the doctoral program "Medical Biology".

18.09.2021

Prepared the statement:



Assoc. Prof. Lyuba Miteva, Ph.D.