#### **STATEMENT**

by Assoc. Prof. Dr. Pepa Petrova Lungarova - Medical University, Pleven

for a dissertation for the award of the educational and scientific degree "Doctor."

To Kalina Yuliyeva Boseva – an independent PhD student in professional field 2.1. Philology, Classical Languages (Medical Latin)

Subject. *Ignis sacer* across the literary and medical traditions (1<sup>st</sup> century B.C. to 11th century A.D.). A study of the term's semantic transformations; identification of associated diseases and therapeutic methods.

#### 1. Procedure data

By Order No. RD-38-103/19.02.2024 I was appointed to the scientific jury for awarding the educational and scientific degree "Doctor" (PhD) to Kalina Yuliyeva Boseva - an independent doctoral student in the professional field 2.1. Philology, Classical Languages (Medical Latin). At a meeting of the scientific jury held on 26.02.2024, I was elected to present a statement. The following materials were provided to me:

- Full text of the dissertation;
- Abstract on the topic in Bulgarian and English;
- Publications and presentations at forums on the topic of the dissertation;
- List of papers printed in proceedings of scientific forums.

The submitted set of materials is in accordance with the Regulations for the Development of the Academic Staff of Sofia University. It complies with the national minimum requirements for obtaining a PhD degree, according to Art. 1 of the Regulations for the Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria.

# 2. Data about the PhD student:

Kalina Boseva completed her secondary education at the National School of Ancient Languages and Cultures "St. Constantine-Cyril the Philosopher" in 2004. She obtained her Bachelor's degree in Classical Philology in 2008 at the Faculty of Classical and Modern Philologies of St. Kliment Ohridski Sofia University. In 2010, she completed a Master's degree programme in Ancient Literature and Culture at the Department of Classical Philology. She worked as a part-time lecturer in Latin language at the Faculty of Classical and the Faculty of History, St. Kliment Ohridski Sofia University (October 2008 to June 2010) and the National School of Ancient Languages and Cultures "St. Constantine-Cyril the Philosopher" (September 2008 to July 2009). Since July 2010, Kalina Boseva has been an assistant professor of Latin with medical terms at the Faculty of Medicine of Sofia University.

### 3. Dissertation and abstract data

The dissertation includes a table of contents, an introduction, three chapters, a conclusion, a list of contributions, references, and four appendices in 470 pages: the body text - 361 pages, the list of references - 33 pages, and 74 pages with appendices. The body text includes 9 tables and 1 figure. In the appendices, there are 214 figures.

In the **Introduction**, the subject, aims, and objectives of the presented research are clearly stated and considered with the choice of appropriate methods, applied diachronically to the huge and heterogeneous corpora prepared in terms of volume and content, for revealing the necessary information in linguistic, historical-medical and ethnophytotherapeutic aspects.

It presents the current state of the studied issues, a starting point for clarifying the semantic changes of pathological terms, and for identifying medicinal substances. The method of cumulative evidence in the analysis of sources is proposed as a tool for identification in the formulation of an acceptable hypothesis or statement.

The interdisciplinary approach of the statistical analysis on the development of the meaning of the term *ignis sacer* in literary and medical writings, in secondary literature sources, as well as in a historical context, is appropriately chosen in order to compare and contrast pathological conditions, therapeutic procedures, names of medicinal herbal, and non-herbal medicinal substances in order to update them according to scientific medical sources, research and classifications.

Chapter One presents the terminological and methodological basis of the study. The ancient and modern concepts of "disease" and "diagnosis" are examined using the comparative method. Retrospective diagnosis is used as a hypothesis to indicate the actual correspondences of the concepts in the analysis of the sources. Emphasis has been placed on the concept of 'pathocenosis,' the content of which largely determines the multidisciplinary approach to carrying out the study. A common relational database has been created for the heterogeneous information material to trace in diachrony the different pathocenoses and the behaviour of the chosen phraseologism and define the medical concepts.

In **Chapter Two**, a textual-critical nosographic and therapeutic analysis of ancient and medieval authors in non-medical and medical and secondary literature sources is consistently and precisely carried out.

The semantic fields and connotations of the two components of the phrase *ignis sacer* and its semantic transformations are revealed, which are not completely reflected in the available Latin lexicographical reference works and in the literature under study. Their relation to using the term in both groups of sources is established based on phraseological features as defined by A. Boguslavsky. The development of the phrase in literary and specialized medical texts in the period from the 1st century B.C. to the 11th century is differentiated through the characteristics of phraseological units selected, and the precise nature of the phrase is determined: in medical texts - denotative usage, and in non-medical texts - phraseological usage.

A comparative analysis is made of the pathological conditions described, their symptoms, and the therapy prescribed in the editions of 12 literary and 22 medical sources. The Ancient Greek terms and their Latin correspondences are indicated, and their semantic concepts are distinguished. The composition of the prescriptions and their sources is traced and summarized, most often with references to Pliny the Elder, Dioscorides, and Hippocrates, allowing innovations and additions to healing practice in subsequent centuries to be pointed out. On the other hand, in the ingredients and combinations described for treatment, the possible identifications have been reasonably achieved, especially in texts that lack descriptions of the symptoms and the course of the disease. The available archaeological evidence has been presented, the method of retrospective diagnosis has been applied, and contemporary symptomatic manifestations of the diseases have been introduced to further clarify the clinical picture with diagnoses made after laboratory tests. The idea of *ignis sacer* and as a divine curse in non-medical ancient and Christian authors is comprehensively discussed. Substantial evidence of the methodological school as opposed to the rational and empiric schools is presented.

**Third chapter** is devoted to identifying medicinal substances used for the treatment of *ignis sacer*. For the identification of the medicinal substances, passages from the sources back to Pliny the Elder are cited through which their origin, their modes of application, their therapeutic, and, rarely, their preventive effects, are traced. The spectrum of action is also included. The appropriate choice of criteria of "functionality" and "origin" in the analysis

allow the categorization of medicinal substances, the frequency and trends of their application in therapeutic procedures to the various manifestations of *ignis sacer*.

Therapeutic substances of plant origin have been studied in great depth. The method of affiliation is chosen, which allows the updating of the phytonyms according to the modern taxonomic concept; the difficulties in the process of affiliation when dealing with later medieval sources and the secondary literature to them are pointed out; the ways of surmounting them are indicated, as well as the phytographic passages in the sources and the grounds for making a plausible identification.

General and specialized dictionaries are used, and the affiliations of plant species in editions, translations, or indices to them are traced comparatively, the notes made on the texts of Pliny and Dioscorides being particularly valuable in this respect. The parallel consideration of medicinal plants has clarified the Old Greek counterparts of the Latin term, which are necessary for analyzing other ancient Greek sources. Critical post-nineteenth-century editions in which botanical identifications made follow the modern taxonomy have been reasonably chosen, and the lack of dictionaries for the identification of inorganic therapeutic substances, as well as the insufficiently comprehensive publications in this field, has been compensated with data from online platforms. The author's goal is achieved by proficiently applying a differentiated approach in analyzing the considerable corpus of phytonyms affiliated with one hundred plant taxa, compiled according to the sources.

## 4. Contributions of the dissertation

The dissertation contains original contributions in terms of scientific and applied results obtained.

It is based on a corpus of sources, comprising 225 citations from sources in Latin (30 known and 2 anonymous) and 45 citations from Ancient Greek sources by four authors. The citations are divided into three groups according to pathological symptomatology, therapeutic procedures, and fictional symptomatology.

A relational database was created as a tool for storing, processing, analyzing, and systematizing the data of a specific medical term.

A precise analysis of the objects of the subject has been carried out based on the created relational database. Their relationship and relations are presented in Appendix 3.

The phraseological status of the term *ignis sacer* in the two traditions, has been determined for the first time by statistical analysis of the source data, setting the 11th century A.D. as a chronological borderline, when it is superseded by *ignis sancti Antonii*.

For the first time, an analysis of the early period of the development of *ignis sacer* has been made.

The types of medicinal substances are identified and the most commonly used therapeutic agents are indicated, illustrated in Appendix 4.

A glossary of 415 Latin lexemes of the analysed medicinal substances has been compiled, for a significant number of which the Ancient Greek equivalents have been provided;

A critical analysis of the secondary literature on the sources has been made, through which and with data from additional medical literature 20 diseases have been identified which are covered by the semantics of *ignis sacer*.

The abstract is a comprehensive review of the issues studied and meets the formal requirements.

## 5. Publications and participation in scientific forums

Assist. Prof. Kalina Boseva's scientific production is represented by a significant number of publications in proceedings and by participation in national and international forums with section papers, posters and articles, which outline her scientific interests in the field of ancient and medieval medical, pharmaceutical and botanical literature, didactic

poetry, medical and botanical Latin terminology, application of relational databases in the study of sources, semantics of phytonyms, ethnobotanical data from Antiquity and the Middle Ages.

She has 10 publications on the topic of the dissertation - a testimony of the lasting interest to the chosen topic.

## 6. Conclusion

The dissertation explores scientifically relevant problems and possesses a competently organized multi-component structure with precisely chosen theoretical propositions. A detailed study in diachrony of the trends in the development of the phrase *ignis sacer* in the literature and in medical sources has been realized and a connection between the analysis of therapy and semantic transformations of pathological terms has been made. Particularly important are the logically derived identifications according to the symptomatology described, the identifications of therapeutic means and procedures for the treatment of *ignis sacer* in the critically analyzed ancient and medieval authors. The relational database created is not only a contribution to the problems under study, but is potentially applicable for tracing and systematizing various medical terms.

Assist. Prof. Kalina Boseva' high competence in linguistics allows her to translate, comment and interpret ancient Greek and Latin texts, to make chronological clarifications and corrections regarding the authenticity of the sources. The rich bibliography of secondary literature is dominated by foreign authors and reference books, most of which have been published in the last twenty years. The nature of the subjects involved in the study of the subject requires not only excellent philological knowledge on the part of the candidate, which K. Boseva undoubtedly possesses, but also a thorough knowledge of ancient and medieval history, the history of medicine, pharmacology and ethnophytonymy.

The high informativeness and the merits of the dissertation give me grounds to recommend to the members of the Honorable Scientific Jury to award to Assist. Prof. Kalina Boseva the scientific and educational degree of Doctor (PhD).

23.04.2024

(Assoc. Prof. P. Lungarova PhD)