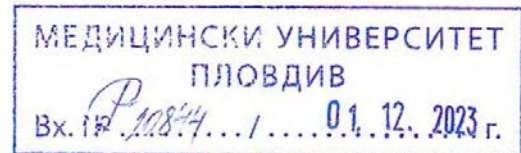To
The Chairperson of the Scientific Jury,
Appoined by Order No. R - 2780 / 03.10.2023,
Issued by the Rector of Medical University - Plovdiv
15A V. Aprilov Blvd.
4002 Plovdiv

Based on the Protocol No. 1/ 12.10.2023

(list of the list   )

МЕДИЦИНСКИ УНИВЕРСИТЕТ
ПЛОВДИВ
Вх. № 1084 / ... 01. 12. 2023 г.

Attached please find : **STATEMENT OF OPINION**
About the competition for the academic position **"Associate Professor"**
professional direction 7.4 Public health
in the scientific specialty **Medical Informatics**
announced for the needs of MU-Plovdiv, the Department of Medical **informatics, Biostatistics and e-Learning**
in State newspaper, no. 59 / 11.07.2023

Prepared the opinion : Professor Yanka Petkova Prodanova, MD, PhD
Scientific specialty: Social Medicine and Organization of Healthcare and Pharmacy
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Statement of Opinion
About the competition for the academic position "Associate Professor"

Candidates in the competition (in alphabetical order):

1. Senior teacher Engineer Angelina Georgieva Kirkova-Bogdanova, PhD
2. Chief assistant professor Antonia Hristova Yaneva, PhD
3. Chief assistant professor Teodora Dimcheva Dimcheva, PhD

Senior Teacher Engineer Angelina Georgieva Kirkova-Bogdanova, PhD

I. Analysis of the candidate's career profile.

Angelina Kirkova-Bogdanova graduated from the Technical University-Sofia, Plovdiv branch, with the educational qualification "Master of Engineering in Electronics and Automation" (in 1993). Since 1998, she has acquired a professional qualification in "Medical Technology and Apparatus" at the same university. In 2007, she completed her second master's degree in "Informatics" at Sofia University, Faculty of Mathematics and Informatics. She began her teaching career in 1994 at the Plovdiv Medical Institute. She successively held the positions of educator (1994-1997), teacher (1997-2007) and senior teacher (2008-2013). From July 2013 until now, she is a senior teacher at MU-Plovdiv, FPH, Department of Medical Informatics, Biostatistics and e-Learning. In September 2017, she obtained the PhD in Medical Informatics at Plovdiv Medical University, Faculty of Public Health, with the topic of her dissertation "E-learning for modern health care education - motivation and skills of students and teachers".

Senior teacher Angelina Kirkova-Bogdanova, PhD is working to increase her qualifications and professional development. There are certificates for completed upgrade courses and seminars. She is fluent in English and Russian.

II. General description of the submitted materials for the competition.

Presented by senior teacher Angelina Kirkova-Bogdanova's documents are in accordance with the provisions of Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations for its application and the Regulations of MU-Plovdiv for academic development (Section IV) for occupying the academic position "associate professor". A notarized certificate of acquired medical specialty is missing.

There is no evidence that the candidate Angelina Kirkova-Bogdanova has acquired a medical specialty, therefore **in Group F, Indicator 15 the 40 points scored by the candidate should not be recognized.**

Senior teacher engineer Angelina Kirkova-Bogdanova, PhD **does not meet** the mandatory minimum requirement of the MU-Plovdiv for holding the academic position of "associate professor" - to have acquired a medical specialty.

III. Evaluation of the scientific works of the candidate for the overall academic development.
✓ **General characteristics of scientific production and publication activity**

Senior teacher Angelina Kirkova-Bogdanova participated in the competition with a total number of submitted works – **93** , distributed as follows:

Group A, Indicator 1 – Dissertation – **1** ;
Group C, Indicator 3 – Habilitation work (monograph) – **1** (independent);
Group D –

- Indicator 5 – Published monograph that is not submitted as a main thesis – **1** (independent);
- Indicator 7 – Publications and reports published in scientific journals, **referenced** and indexed in world databases of scientific information (only Scopus and Web of science) – **17**;
- Indicator 8 - Publications and reports published in **non-refereed** peer-reviewed journals or edited collective volumes – **67**;
- Indicator 9 - Published chapter of a collective monograph - **2**;

Group F, Indicator 21 - Published university textbook - **4** (co-authored).

The submitted monograph "E-Learning in Health Care" (in Group D, Indicator 5) is based on a defended dissertation and should be noted and reported in Group D, Indicator 6.

Senior teacher Angelina Kirkova-Bogdanova presents 17 publications in scientific publications, referenced and indexed in world-renowned databases of scientific information (only Scopus and Web of science), of which 7 as full-text articles in a journal with IF. **One of the articles with IF is in print, but a document from the journal editorial office is missing and it should not be reviewed** (No 17 on the list). Another 4 are letters to the editor of the Iranian Journal of Public Health (No 2, 4, 9, 13) expressing the authors' opinion on the prevention of type 2 diabetes, osteoporosis, and Alzheimer's disease prevention, but with no original results presented. Due to the large difference between a full-text original publication (with scientific results and contributions or a scientific overview) and the **4 letters presented should not be accepted for review.**

I admit 12 full-text publications – 2 of them **with IF** and **10** refereed and indexed without IF.

Senior teacher Angelina Kirkova-Bogdanova, PhD **does not meet the requirement of MU-Plovdiv for 15 publications, 10 of them in Scopus or Web of Science and 5 of them with an impact factor.**

67 full-text publications and reports published in non-refereed peer-reviewed journals or in edited collective volumes are submitted for participation in the competition. Of these, **5 articles are not subject to review** – 3 articles (No 42, 53 and 57), which were submitted for the educational and scientific degree "Doctor" procedure and 2 articles that are in print, but for which no service notes from the editors of the Knowlegde International Journal are attached (No. 66, 67).

The main thematic areas in the research activity of senior teacher Angelina Kirkova-Bogdanova are in the following areas: the training of medical and health professionals in an electronic environment, public health, information and communication technologies in health care and research related to the educational process at the MU-Plovdiv.

The presented **2 participations in author collectives of chapters of collective monographs** do not meet the relevant requirements ("... in order to consider the work as monographic, the author should have an independent number of pages that meet the definition of a monograph. In the case of authorship of a smaller number pages, the participation of the corresponding author is considered a study/article"), and **should not be taken into account in this competition.**

Senior teacher Angelina Kirkova-Bogdanova, PhD has contributed to 4 teaching textbooks, including in English for a cooperative international online master's program in gerontology under the GEROM project. She is an expert in teaching methodology at the Center for Electronic and Distance Learning of MU-Plovdiv with author's courses at CEDL "Academy for Teachers".

✓ **Scientific activity - distribution and application of the scientific and practical achievements of the candidate/s among the scientific community**

Angelina Kirkova-Bogdanova has realized 20 participations in scientific forums, 14 of them were international and 6 national.

According to the candidate's works, the focus is on the problems of training medical and health professionals in an electronic environment, the application of information and communication technologies in health care, current and significant problems of public health. They contain scientific, scientific-applied and methodical contributions.

✓ **Participation in the implementation and management of projects**

Angelina Kirkova-Bogdanova, PhD reports participation in 13 national and 8 international projects, but in reality the candidate participates in 1 intra-university project, 8 national projects and 5 international projects, because several activities on one project are counted as one participation. **According to the current competition, I respect participation in 1 intra-university, 8 national projects (9 national projects in total) and 5 international projects.**

✓ **Scientific and creative achievements (scientific authority)**

Senior teacher Angelina Kirkova-Bogdanova, PhD, is a member of renowned organizations: the Union of Scientists in Bulgaria, the Bulgarian Scientific Society for Public Health, the International Society of Global Health and the Athens Institute for Education and Research.

She is a reviewer for the Scopus-referenced Athens Journal of Education and the Qeios preprint server with reviews referenced in Web of Science.

The candidate is an expert in teaching methodology at the Center for Electronic and Distance Learning of MU-Plovdiv with author's courses at CEDL "Academy for Teachers".

✓ **Guide for PhD students**

Teacher Angelina Kirkova-Bogdanova, is a scientific consultant to a doctoral student in the "Health Care Management" doctoral program in the "Public Health" field, but the consulting activity is not the same as the scientific guidance. Only qualified persons – associate professors and professors - have the right to scientific supervision of doctoral students, that is the reason why Indicator 14 of Group F **should not count as an activity of supervising a successfully defended doctoral student.**

IV. Evaluation of the monographic work or equivalent publications submitted by the candidate for participation in the "Associate professor" competition.

The monographic work "Designing training in an electronic environment for medical and health specialties" presented by Angelina Kirkova-Bogdanova undoubtedly enriches the scientific literature by scientifically justifying the approach to training in an electronic environment, and from a didactic point of view – through an extensive presentation of the variant possibilities of application of innovative teaching methods, strategies for learning, social and constructive learning, freedom in extracurricular work, which are difficult to implement in the case of a traditional face-to-face teaching process and in the direction of the teacher; and through the well-argued scientific applied approach to the creation of electronic courses, giving independence to the university teacher in the design of the training. The paper is both practically oriented and educationally applicable.

V. Reflection (citation) of the candidate's publications in national and foreign literature (publication image).

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The publications of senior teacher Angelina Kirkova-Bogdanova, PhD are widely known among the scientific community. A reference is presented with 28 citations and 15 reviews in scientific publications, referenced and indexed in world-famous databases with scientific information (IF and SJR). The candidate senior teacher Angelina Kirkova-Bogdanova, PhD **meets the requirement of MU-Plovdiv for 10 citations** in journals referenced in Scopus and/or Web of Science.

A reference is provided for 37 citations in monographs and collective volumes, of these I **acknowledge 10** citations. **I do not accept 27** citations of which: 3 self-citations (№7.4; 13.1; 13.2); 5 citations in dissertations, abstracts and theses (№3.1; 4.2; 8.1; 15.2; 15.3), as well as 19 citations in conference proceedings or in periodicals. I accept the last **19 as citations in non-refereed journals**.

The candidate correctly presents another 19 citations and 4 reviews in non-refereed journals.

VI. Complex, qualitative evaluation of the teaching-methodical and teaching activity, incl. scientific guidance of students, doctoral students, specialists.

Senior teacher Angelina Kirkova-Bogdanova, PhD is actively involved in the teaching activities of the department. She has lectures and conducts practical exercises in "Informatics" for students in "Nurse" and "Midwife" specialties for educational degree "Bachelor". She conducts exercises in the discipline "Informatics" for the specialties "Rehabilitator", "Dental Technician", "Assistant Pharmacist", "Public Health Inspector", "Medical Laboratory Technician" and "X-ray Laboratory Technician" for educational degree "Professional Bachelor". She is also thematically engaged and participates in lecture teaching on "Information Technologies" in the specialty "Rehabilitation, wellness, spa and balneotherapy" for educational degree "Master". She teaches in the freely selectable discipline "Working with software products" for the specialties "Dental Technician" and "X-ray Laboratory Technician".

The candidate creates and maintains electronic courses in the Moodle e-learning platform of MU-Plovdiv.

Senior teacher Angelina Kirkova-Bogdanova, PhD actively works together with students and doctoral students and has 15 publications in national and international journals and anthologies with them.

She is a scientific consultant on biostatistical analyzes of a doctoral student in the "Health Care Management" doctoral program in the "Public Health" field.

Angelina Kirkova-Bogdanova, PhD is included and teaches in mobilities under the Erasmus+ program: Athens – 2015; Daugavpils – 2019; Jurmala – 2022 and Bitola – 2023.

The workload reported by the candidate does not correspond to the explanation that it should be formed only by the hours of lectures and exercises. From the study load report presented, the actual amount of lectures and exercises is 995 hours for the last 2 academic years (for 2022/2023 it was 500 academic hours and for 2021/2022 it was 495 hours). **The academic load norm for MU-Plovdiv has been reached and fulfilled.**

According to data from the report submitted by the staff, Angelina Kirkova-Bogdanova was appointed and works as a senior teacher. According to the Higher Education Act, "senior teacher" is not an academic position and therefore in the Index 2 of Group G **no points should be counted for an occupied academic position.**

VII. Critical notes and recommendations.

No critical notes and recommendations.

VIII. General assessment of the applicant's compliance with the minimum national requirements under Art. 2b, para. 2 and 3, respectively, to the requirements under Art. 2b, para. 5 of the ADASRB and the requirements specific to MU - Plovdiv by direction and for units with/without clinical activity, defined in the Regulations for Academic Development at the Medical University - Plovdiv.

The review and evaluation of the presented documents and materials by senior teacher Angelina Kirkova-Bogdanova, PhD shows that according to the indicators:

- D. 7. Publications and reports published in scientific publications, referenced and indexed in a global database of scientific information (only Scopus and Web of science) **- there are only 2 articles with an impact factor** and 10 in journals referenced in Scopus and/or Web of Science, i.e. **does not respond** of the requirement of MU-Plovdiv for **15** articles, **10** of them in journals referenced in Scopus and/or Web of Science, incl. **5** articles with **IF**.

- F.15. Acquired medical specialty - does not have an acquired medical specialty and is **not responsible** to the requirement of MU-Plovdiv.

The candidate senior teacher Angelina Kirkova-Bogdanova, PhD **does not show full compliance** with the minimum requirements for occupying the academic position "associate professor" in the field of higher education 7. Health care and sports, professional direction 7.4. Public health, specified in the Regulations for academic development at the Medical University - Plovdiv.

IX. Conclusion – meets / does not meet the mandatory and specific conditions and scientometric criteria - for the academic position "Associate professor".

Senior teacher Angelina Kirkova-Bogdanova, PhD, **does not meet** the minimum requirements of MU-Plovdiv for holding the academic position "Associate professor".

Chief assistant professor Antonia Hristova Yaneva, PhD

I. Analysis of the candidate's career profile.

Antonia Hristova Yaneva has a bachelor's degree in "Informatics", and during the period 2005 - 2008 she successively acquired a master's degree in higher education in "International trade" and "Financial management" of Plovdiv University "Paisii Hilendarski". In 2017, she successfully completed a master's degree in "Public health and health management" at the Medical University - Plovdiv.

Her academic career has begun in 2015, and until now she works in the Department of Medical Informatics, Biostatistics and e-learning in the Faculty of Public Health, MU – Plovdiv. She successively holds the academic positions of assistant (2015-2021) and chief assistant (from 2021 to the present). She has a specialty in "Medical informatics and health management" since 2019. In 2020, after successfully defending her dissertation thesis on "Computerized cognitive training in late age". She acquired educational and scientific degree "doctor" by doctoral program "Medical informatics" of the Department of "Medical informatics, biostatistics and electronic training", from the Faculty of public health, Medical University - Plovdiv.

Chief Assistant Antonia Yaneva, PhD works actively to increase her qualification and professional development. There are certificates for completed upgrade seminars. Excellent command of English, French and Russian (for all three languages with B2 levels of reading, writing, conversation).

II. General description of the submitted materials for the competition.

Chief assistant professor Antonia Yaneva, PhD had submitted all the required documents in accordance with the provisions of the ADASRB, the Regulations for its application and the Regulations of the MU - Plovdiv for academic development (Section IV) for occupying the academic position "associate professor". The documents are informative and allow an analytical assessment to be made.

III. Evaluation of the scientific works of the candidate for the overall academic development.
  ✓ **General characteristics of scientific production and publication activity**

Chief assistant professor Antonia Yaneva, PhD participated in the competition with a total number of submitted papers – 46, distributed as follows:

Group A, Indicator 1 – Dissertation – **1**;

Group C, Indicator 3 – Habilitation work (monograph) – **1** (independent);

Group D –
- Indicator 6 – Published book (which has an ISBN) based on a defended dissertation work – **1** (independent);
- Indicator 7 – Publications and and reports published in scientific journals, **referenced** and indexed in world-renowned databases of scientific information (only Scopus and Web of science) – **10 full-text;**
- Indicator 8 - Publications and reports published in **non-refereed** peer-reviewed journals or edited collective volumes – **33.**

Chief assistant professor Antonia Yaneva, PhD presents 43 full-text publications, 10 of them in Scopus and Web of Science, of which: with Impact Factor – 7 publications, first author - 2 publications. She is first or sole author in 7 of 33 full-text publications and reports in non-refereed peer-reviewed journals or edited collective volumes. In general, the candidate is independent or first author in 9 (20.9%) of 43 publications.

  ✓ **Scientific activity - distribution and application of the scientific and practical achievements of the candidate/s among the scientific community**

After occupying the academic position of "chief assistant professor", Antonia Yaneva has realized 34 participations in scientific forums, of these 15 internationals and 19 national.

  ✓ **Participation in the implementation and management of projects**

Chief assistant professor Antonia Yaneva participated in 12 projects (team member), of these: intra-university projects – 4 projects; national and educational – 6 projects; international – 2 projects. All projects have been successfully completed.

  ✓ **Scientific and creative achievements (scientific authority)**

The candidate is a member of two authoritative national scientific associations - the Bulgarian Scientific Society for Public Health (since 2016) and the Union of Scientists in Bulgaria (since 2015).

IV. Evaluation of the monographic work or equivalent publications submitted by the candidate for participation in the "associate professor" competition.

Antonia Yaneva's habilitation thesis "Predictive modeling for optimal clinical decisions" has important aspects of predictive statistical modeling and its application in clinical practice is discussed in three logically connected chapters. Definitions, concepts, and methods related to the development and evaluation of predictive models are presented sequentially. Important issues related to the choice of design for prognostic and diagnostic clinical trials are discussed. An in-depth analysis of the data was performed to identify patterns. Given their importance, special attention has been given to the evaluation and validation of predictive models, as this would help researchers to present them more precisely. I would like to highlight its completeness as a methodological development in the field as the main important issue of the monograph. This makes it useful and valuable for both researchers and clinicians in practice. In this sense, Antonia Yaneva's monograph has a contributing theoretical and applied character.

V. Reflection (citation) of the candidate's publications in national and foreign literature (publication image).

The publications of Chief Assistant Professor Antonia Yaneva are known among the scientific community. A reference to 16 citations in scientific publications, referenced and indexed in world-renowned scientific information databases (IF and SJR). Of these, 8 are in journals with IF.

The candidate also presents 19 citations in monographs and peer-reviewed collective volumes. I **do not accept 1 citation** due to co-author self-citation (article in position 2, in which K. Kilova is both author and citing author) and **10** more **citations** in conference proceedings or periodicals (1, 2, 3 citation of article no. 3; 1 and 2 citing article no 4; 1 of article no 5, as well as the citations of articles No. 6, 7, 8 and 9), but the last 10 are accepted for citations in non-refereed journals (Group E – Indicator 12).

VI. Complex, qualitative evaluation of the teaching-methodical and teaching activity, incl. scientific guidance of students, doctoral students, specialists.

In the submitted reports on academic workload during the academic years 2022/2023, 2021/2022 and 2020/2021, she realized annual employment (from lectures and exercises only) exceeding the normatively determined for non-qualified teachers of 360 hours/academic year is established.

Chief assistant professor Antonia Yaneva participates in conducting seminars and practical exercises in Medical statistics and informatics, Statistical methods in management, Methodology of research work, Information technologies, Information technologies in health organization management, Quantitative methods in management, Computer technology in the specialties "Management of Health Care" (educational degree "Bachelor" and "Master"), "Public Health and Health Management" (educational degree "Master"), "Rehabilitation, Wellness, Spa and Balneotherapy" (educational degree "Master"), "Medical Management -social activities and public health" (educational degree "Master's"), "Dental Medicine" (educational degree "Master's" training in Bulgarian and English).

For the last 2 academic years, her workload as a Chief Assistant professor is calculated as total 736 hours (2022/2023 – 390 hours; 2021/2022 – 346 hours).

From the professional description of the candidate (prepared by the Head of the Department of Medical Informatics, Biostatistics and E-Learning, Professor Nonka Mateva, PhD), it is clear that Chief Assistant professor Antonia Yaneva:

- prepares and delivers the lecture course on "Information Technologies" for medical assistants, as well as the practical classes on the discipline "Statistical methods and analyses" in the specialty "Pharmaceutical Business Management";
- within the framework of the OMNIA project is involved in the development of the Master's program Biostatistics, where she is a leading teacher in the discipline "Statistical design of studies" and participates in the teaching in the disciplines "Biostatistics - theory and methods" (parts 1 and 2), "Statistical forecasting" and "Data research in medicine and healthcare';
- since 2019, twice a year she participates as a teacher in the course on "Statistical software package SPSS v.17" from the group curriculum of the doctoral school of the Medical University of Plovdiv.

Chief assistant professor Antonia Yaneva participated together with students and doctoral students in 4 publications in non-refereed journals and 2 projects - one national "Electronic health care in Bulgaria - eHealth" and one intra-university "Application of (bio)printing in personalized medicine - ethical, social and legal aspects".

VII. Critical notes and recommendations.

No critical notes and recommendations.

VIII. General assessment of the applicant's compliance with the minimum national requirements under Art. 2b, para. 2 and 3, respectively, to the requirements under Art. 2b, para. 5 of the ADASRB and the requirements specific to MU - Plovdiv by direction and for units with/without clinical activity, defined in the Regulations for Academic Development at the Medical University - Plovdiv.

Chief assistant professor Antonia Hristova Yaneva, PhD fully meets all quantitative criteria, scientometric indicators, as well as the mandatory and specific conditions for occupying the academic position "associate professor" at the MU-Plovdiv. She significantly exceeds the mandatory minimum scientific and metric indicators of MU-Plovdiv - 1794.2 points more than the required 1000 points for holding the academic position "associate professor".

IX. Conclusion - meets / does not meet the mandatory and specific conditions and scientometric criteria - for the academic position "Associate professor" / "Professor".

The candidate chief assistant Antonia Hristova Yaneva, PhD **meets** the mandatory, specific requirements and scientific and metric criteria for occupying the academic position "Associate Professor".

Chief assistant professor Teodora Dimcheva Dimcheva, PhD

I. Analysis of the candidate's career profile.

Teodora Dimcheva Dimcheva, after obtaining a bachelor's degree in "Business Administration" at the European Higher School of Economics and Management, Plovdiv, continues her education at Medical University - Plovdiv, Faculty of Public Health. She successively acquired: educational degree "Master" in "Health Management and Public Health" – 2010, and educational and scientific degree "Doctor" in Medical Informatics - 2017 and specialty in Medical Informatics and Health Management in the same year. Teodora Dimcheva 's academic

career has begun in May 2012 as an assistant at the Department of "Medical Informatics, Biostatistics and Electronic Learning" at the Faculty of Public Health of the Medical University of Plovdiv. She is a chief assistant professor in the same department since 06.10.2017.

Chief assistant professor Teodora Dimcheva, PhD works to increase her qualification and professional development. This is confirmed by the certificates for completed upgrading seminars and courses. She has an excellent command of English (level B2), as he also uses German in her work.

II. General description of the submitted materials for the competition.

Chief assistant professor Teodora Dimcheva, PhD has submitted all the required documents in accordance with the provisions of the ADASRB, the Regulations for its application and the Regulations of MU-Plovdiv for academic development (Section IV) for occupying the academic position "associate professor". The documents are informative and allow an analytical assessment to be made.

III. Evaluation of the scientific works of the candidate for the overall academic development.
   ✓ **General characteristics of scientific production and publication activity**
Chief assistant Teodora Dimcheva, PhD, participated in the competition with a total number of submitted papers – 63, distributed as follows:

Group A, Indicator 1 – Dissertation – **1**;

Group C, Indicator 3 – Habilitation work (monograph) – **1** (independent);

Group D –
- Indicator 6 - Published book (which has an ISBN) based on a defended dissertation – **1** (independent);
- Indicator 7 – Publications and and reports published in scientific journals, **referenced** and indexed in world-renowned databases of scientific information (only Scopus and Web of science) – **15 full-text;**
- Indicator 8 - Publications and reports published in **non-refereed** peer-reviewed journals or edited collective volumes – **44;**

Group F, Indicator 20 – University textbook published – **1** (co-authored).

15 full-text publications referenced and indexed in Scopus and Web of science are presented. Of these, 6 are with Impact Factor (Clarivate Analytics ex Thomson Reuters). She is the independent or first author of 3 of the 15 publications referenced and indexed in Scopus and Web of Science, 2 of them are with IF.

Chief assistant professor Teodora Dimcheva participated in the competition with 44 publications in non-refereed journals with scientific reviewing or in edited collective volumes (4 of them not subject to review - № 36, 37, 38 and 42, which were presented for the procedure for educational and scientific degree "PhD" and they are removed from the general sum points by this indicator). Chief assistant professor Theodora Dimcheva is independent or first author in 15 from 40 publications. In general, the candidate is independent or first author in 18 (33.3%) of 53 published articles.

The scientific contributions from presented scientific research activity of chief assistant professor Teodora Dimcheva have practical-applied character – as both original and confirming the existed scientific knowledge. The main topic areas in research activity are directed to: the modern application on information and communication technologies in healthcare; management on patients with chronic non-infectious diseases, especially chronic obstructive pulmonary

disease; management of human resources in healthcare (assessment of the psycho-social conditions on labor of medical nurses and general practitioners; theory and practice on the qualitative research methodology in healthcare; training on healthcare professionals and quality on the medical education; current and relevant problems in the field of public health, and others.

The candidate also submits a university textbook "Medical informatics - test questions and practical tasks", with more than 200 test questions and 26 practical tasks thematically related to the disciplines "Computer technology" and "Medical informatics", which are parts of the master's and bachelor's programs for the specialties Dental Medicine and Healthcare management.

This work, as a type of publication, essentially does not meet the requirement for a textbook (as an educational material) and should not be recognized as such in Group F, Indicator 20. In the preface, the authors themselves call it a collection, specifying that it can be used and as a teaching tool. I share their opinion and report it as a published university manual in Group F, Indicator 21.

✓ **Scientific activity – distribution and application of the scientific and practical achievements of the candidate/s among the scientific community**

After taking the academic position of "chief assistant professor", Teodora Dimcheva has participated in 61 scientific forums, of these 44 internationals and 17 nationals. The candidate is an independent or first author in 24 (39.9 %) of 61 presented scientific reports.

The contributions in the individual directions have an original and confirmatory character. In all sections, there are contributions in the design and the conduct of the research itself, the creation of own toolsets, methodological approaches in the interpretation and generalizations, as well as proposals of an applied nature.

Chief assistant professor Teodora Dimcheva, PhD is a participant in the Project "Doctoral Education at MU-Plovdiv for Competence, Creativity, Originality, Implementation and Academicism in Science and Technology - 2 (PhD student - 2)", related to the promotion of science and scientific research among young people scientists.

✓ **Participation in the implementation and management of projects**

Chief assistant professor Teodora Dimcheva participated in 10 projects (team member), of which: intra-university projects – 2 projects; national scientific or educational projects – 7 projects; international – 1 project. All projects have been successfully completed.

Due to lack of implementation of scientific/educational work in Project BG051PO001-4.3.04-0035 (#1 on the list), this participation **should not** be taken into account in the current competition (Group F, Indicator 16).

✓ **Scientific and creative achievements (scientific authority)**

The list of memberships is impressive - chief assistant professor Teodora Dimcheva is a member of 10 authoritative scientific organizations and associations, 5 of them are international. She also participated in the organizing committees of 3 scientific forums – Second Bulgarian-Greek Scientific Conference, Plovdiv, October 8-10, 2010 ; Third National Conference on Rare Diseases, Plovdiv, September 14-15, 2012 ; Third national conference "Public health - the capital of the future" of the Bulgarian Scientific Society for Public Health, Plovdiv, May 30 - June 1, 2019.

Proof of the scientific authority of the production of chief assistant professor Teodora Dimcheva are 15 publications and 40 citations in scientific publications, referenced and indexed in world-famous databases with scientific information (only Scopus and Web of Science).

IV. Evaluation of the monographic work or equivalent publications submitted by the candidate for participation in the "Associate professor" competition.

The monographic work "Qualitative studies in health care" presented by chief assistant professor Teodora Dimcheva concerns qualitative studies - their importance and applicability in the field of health care. It examines theoretical frameworks to show the value of some qualitative techniques and how they can complement scientific research. The methodology and methodology for conducting this type of research are presented. The theoretical propositions are supported by numerous examples from biomedical practice, and they are selected in view of their practical utility. The ethical aspects of organizing and conducting qualitative research in the field of health care are also considered. The publication, as describing the application of qualitative research methods in the field of biomedical sciences, is not only cognitive, but also a practical and applied contribution and contributes to increasing the quality of research developments in the field of medicine and healthcare.

V. Reflection (citation) of the candidate's publications in national and foreign literature (publication image).

The publications of chief assistant professor Teodora Dimcheva are widely known among the scientific community. Proof of the importance of her work are the citations that she presents as evidentiary material - it contains a reference **40 citations** in scientific publications, referenced and indexed in world-famous databases with scientific information (IF and SJR).

The candidate also presents 24 citations in monographs and peer-reviewed collective volumes. I **do not accept 4 citations** in dissertations and theses (No. 1.1; 1.6; 5.1; 5.6), as well as 15 more citations **in conference** proceedings or in periodicals, which are recognized for citations in non-refereed journals (Group E – Indicator 12).

VI. Complex, qualitative evaluation of the teaching-methodical and teaching activity, incl. scientific guidance of students, doctoral students, specialists.

Chief assistant professor Teodora Dimcheva, PhD, participates in conducting practical and seminar exercises and has a thematic involvement in lecture teaching in the academic disciplines: "Medical statistics and informatics", "Statistical methods in management", "Statistical methods and analyses", "Biostatistics - theory and methods part 1 and 2", "Statistical software in public health - SPSS", "Informatics", "Computer technology", "Health projects", "Methodology of research work", "Information technologies in management", "Information insurance in the field of medico-social activities", "Quantitative methods in management", "Health informatics".

The workload reported by the candidate does not correspond to the explanation that it should be formed only by the hours of lectures and exercises. From the study workload report presented, the actual amount of lectures and exercises is 846 hours for the last 2 academic years. The norm for study load for MU - Plovdiv has been reached and fulfilled.

As a member of the OMNIA Project team and teacher, Teodora Dimcheva worked on the development and introduction of new curricula.

The joint work with students, specialists and doctoral students of chief assistant professor Teodora Dimcheva is very active. Proof of this is her participation with them in 6 national educational projects and 1 international project, as well as her publication activity with the participation of students and doctoral students - 3 publications with IF, 4 referenced in Scopus and Web of science and 36 publications and reports published in non-refereed peer-reviewed journals or in edited collective volumes shows her responsibility and commitment to work in this direction.

Chief assistant professor Teodora Dimcheva is an academic mentor who supported the practical training of students from educational degree "Bachelor" and "Master" in Health Care Management (Project of the Ministry of Education and Culture "Student Practices" 2017 - 2019).

During the period from 2017 to 2022 inclusive, Teodora Dimcheva participated in the training of medical and non-medical specialties with a total load of 200 study hours. She is involved in two courses: "Working with Microsoft Office" and "Basics on biostatistics. Statistically software package SPSS V. 17.0".

From the program of the doctoral school in MU-Plovdiv for the summer semester of the academic year 2022-2023, it is clear that Chief assistant professor Teodora Dimcheva, PhD, participates in the training of PhD students, together with Chief assistant professor Antonia Yaneva and Professor Nonka Mateva, MD.

In addition, I will note that since 2012 the candidate Teodora Dimcheva is a chief administrative assistant in the department of Medical informatics, biostatistics and e-learning. As a certified auditor according to ISO 9001:2015, she participates in the annual internal audits of all structural units of MU-Plovdiv and with her knowledge and experience she supports her department in establishing and confirming good practices regarding the quality of work, which contributes to maintaining the high image of the structural unit.

VII. Critical notes and recommendations.

No critical notes and recommendations.

VIII. General assessment of the applicant's compliance with the minimum national requirements under Art. 2b, para. 2 and 3, respectively, to the requirements under Art. 2b, para. 5 of the ADASRB and the requirements specific to MU - Plovdiv by direction and for units with/without clinical activity, defined in the Regulations for Academic Development at the Medical University - Plovdiv .

Chief assistant professor Teodora Dimcheva Dimcheva, PhD fully meets all quantitative criteria, scientometric indicators, as well as the mandatory and specific conditions for occupying the academic position "associate professor" at the MU - Plovdiv. It significantly exceeds the mandatory minimum scientometric indicators of MU-Plovdiv - 2845.5 points more than the required 1000 points for occupying the academic position "associate professor".

IX. Conclusion – meets / does not meet the mandatory and specific conditions and scientometric criteria - for the academic position "Associate professor".

The candidate chief assistant professor Teodora Dimcheva Dimcheva, PhD **meets** the mandatory and specific conditions and scientometric criteria for occupying the academic position "associate professor".

X. (in the case of more than one candidate) Proposal for ranking/occupation of the position.

The following table presents the grades for all scientometric indicators and the overall grade for fulfilling the minimum requirements of the MU - Plovdiv for holding the academic position of "associate professor":

A group of indicators	Angelina Kirkova-Bogdanova	Antonia Yaneva	Teodora Dimcheva
A Indicator 1	50	50	50
C Indicator 3 or 4	100	100	100
D Sum of indicators from 5 to 9	1054.24 **12 articles of which 10 in journals referenced in Scopus and/or Web of Science , incl. 2 articles with IF**	431.2	704.2
E Sum of indicators from 10 to 12	955	385	755
F Sum of indicators from 13 to 22	256.66 **without an acquired medical specialty**	260	213.3
G Sum of indicators: teaching activity	497.5	568	1023
Total	**2913.4**	**1794.2**	**2845.5**

Senior teacher engineer Angelina Kirkova-Bogdanova, PhD **does not answer** of the requirement of MU-Plovdiv for occupying an academic position "associate professor" according to indicator D for 15 articles, 10 of them in journals referenced in Scopus and/or Web of Science, incl. <u>5 articles with **IF**</u> and by indicator F for an acquired medical specialty, which is why it is not subject to ranking.

Chief assistant professor Antonia Yaneva, PhD, and chief assistant professor Teodora Dimcheva, PhD, **meet** all quantitative criteria, scientometric indicators, as well as the mandatory and specific conditions for holding the academic position "associate professor" at MU - Plovdiv.

Chief assistant professor Teodora Dimcheva, PhD has higher marks on indicators D, E and G, as well as **a higher overall mark** than chief assistant professor Antonia Yaneva, PhD.

Taking into account the indicators reflected in the materials submitted for the competition, **I positively evaluate the candidacy of chief assistant Teodora Dimcheva, PhD**, who fully meets and significantly exceeds the required points on the scientometric indicators for the minimum requirements of the MU-Plovdiv for occupying the academic position of "associate professor".

I recommend to the esteemed members of the Scientific Jury to elect Chief Assistant **Teodora Dimcheva Dimcheva, PhD** the academic position "associate professor" in the field of higher education 7. Health care and sports, for professional direction 7.4. Public Health, in the scientific specialty "Medical Informatics" at the Department "Medical informatics, biostatistics and e-learning" of the Health and Medical Sciences, MU-Plovdiv.

29.11.2023   Prepared the Opinion:
Sofia city   /prof. Yanka Prodanova, MD, PhD/