

To
The chairman of the scientific jury,
determined by Order No. R - 4186 / 16 . 07 .2026
of the Rector of the Medical University – Plovdiv
V. Aprilov Blvd. №15A
4002 Plovdiv

On your Protocol No. 1 / dated 28. 07.2026
(date of the 1st meeting)

I present attached: Review

by competition for the academic position of " Associate Professor "
in the scientific specialty " Physiology "
announced for the needs of MU-Plovdiv, Department of Physiology in the State Gazette, issue
. 44 / 14 . 05 .2026 years

Reviewer: Prof. Dr. Delyan Penev Delev, MD, PhD
Scientific specialty: "Pharmacology (incl. pharmacokinetics and chemotherapy)"
Institution: Medical University - Plovdiv

Address and contacts:

Postal add:

Email add:

Phones: 08

Заличено на основание
Чл.5 §1, 6."В" Регламент (ЕС)2016/679

elo
z.b

Заличено на основание
Чл.5 §1, 6."В" Регламент (ЕС)2016/679

REVIEW

by Prof. Dr. Delyan Penev Delev, MD

Faculty of Medicine, Department of Pharmacology and Clinical Pharmacology,
Medical University – Plovdiv

Member of the scientific jury for AD “associate professor” (published in the State Gazette, issue 44 of 14.05.2026), approved by order of the Rector No. R- 4186 / 16. 07.2026 , field of higher education 7. Health and sports, professional field 7.1. Medicine, specialty “ Physiology ” – one, full-time position for teaching Bulgarian and English for the needs of the Department of “ Physiology ”, Faculty of Medicine at the Medical University - Plovdiv.

One person participated in the competition candidate - **Ch. Assistant Professor Penka Angelova Hristova , Ph.D.**

Structurally, the opinion is composed of eight parts and a conclusion, which assesses career development, research, teaching, administrative and public activities, expresses personal impressions of the candidate, and provides recommendations and notes on his/her activities.

I. Analysis of the candidate's career profile.

Chief Assistant Professor Penka Angelova Hristova, MD , was born on December 1, 1977. She lives and works in Plovdiv. Her professional development is related to medicine, academic teaching and research.

Her professional path began in 1998, when she started working as a clerk. From 2003 to 2009, she worked as a general practitioner. Since 2007, she has been part of the academic staff of the Department of Physiology at the Medical University - Plovdiv, initially as an assistant professor, and since 2016, she has held the position of chief assistant professor.

Penka Angelova Hristova completed her secondary education at the Model Mathematical High School "Acad. Kiril Popov" in Plovdiv. In the period 1996–2002, she studied at the Medical University - Plovdiv, where she obtained a master's degree and professional qualification "physician". In 2007, she obtained a specialty in General Medicine, and in 2014 - a specialty in Physiology. In 2015, she defended her educational and scientific degree "Doctor".

As part of his subsequent professional development in 2024–2025, he is studying in a joint master's program of the Medical University - Plovdiv and the National Sports Academy "Vasil Levski" in "Sports Physiology, Sports Cardiology and Sports Traumatology".

A significant part of Penka Angelova Hristova's professional activity is related to teaching human physiology. She conducts a full course of training for students from various specialties, including medicine, dentistry, pharmacy, nursing, midwifery, rehabilitation, pharmacist assistant, medical laboratory technician, X-ray laboratory technician, public health inspector and dental technician. She also participates in the training of instructors in public health and nutrition and food safety. Along with her teaching activities, she participates in the preparation of manuals and tests in human physiology.

Her research interests focus on nutrition, exercise, sports medicine, obesity and metabolic syndrome. Her scientific work includes conducting functional tests, developing and implementing dietary programs, exercise programs and combined programs, as well as experimental studies with experimental animals.

Penka Angelova has participated in several scientific projects. She is the lead researcher of VUP NO 37/2012 and a participant in the author teams of VUP NO 35/2012 and VUP NO 05/2015.

Her scientific output includes more than 20 publications in national and international scientific journals. She also actively participates in national and international scientific forums, where she presents results of her research activities.

For her scientific achievements, Penka Angelova has been awarded an Honorary Diploma from the IVth International Conference of the Young Scientists – Plovdiv 2013, organized by the Union of Scientists in Bulgaria. He also received a certificate for the best scientific article for the publication “ Changed C- reactive protein and serum amyloid -A levels in blood , fat tissue and liver of obesity induced "rats ".

Dr. Penka Angelova Hristova speaks English at a very good written and spoken level and Russian at a good written and spoken level. She speaks French at a basic general language level. She has computer skills for working with Microsoft Word, Excel, PowerPoint and SPSS.

The professional path of Dr. Penka Angelova Hristova, MD combines medical practice, university teaching, and research. Her academic and scientific activities are focused primarily in the fields of human physiology, nutrition, exercise, sports medicine, obesity, and metabolic syndrome.

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

The materials for the competition, submitted to me on paper and electronically, are attached as a complete set, in accordance with the Regulations of the Medical University - Plovdiv and contain :

1. Application to the Rector of the Medical University - Plovdiv, for admission to participate in the competition with a description of the documents;
2. Creative autobiography in European format;
3. Diplomas for completed higher education, including a diploma for completed medical education from the Medical University - Plovdiv , a diploma for the acquired scientific and educational degree "doctor" from the Medical University - Plovdiv , a diploma for a recognized specialty "Physiology";
4. Certificate of internship in the relevant specialty ;
5. Academic report on the study load;
6. Copy of the latest attestation sheet;
7. List of publications in refereed and non-refereed journals ;
8. List of citations in refereed and non-refereed journals;
9. Abstract of the dissertation and monograph.
10. A report on original scientific contributions and a self-assessment report according to a template;
11. Other documents and evidence related to the procedure.

III. Evaluation of the candidate's scientific works for overall academic development.

I highly appreciate the publication activity of Dr. Penka Angelova Hristova, MD . She is a second of 1 monograph , co-author of 1 collective monograph and 27 scientific articles ; has 3 participations in international scientific forums, co-author of teaching aids .

The candidate participated in the competition with 1 monograph and 27 scientific papers, as follows:

- Monograph on the topic " Physical Activity and Chronic Non-Communicable Diseases " 2026 Aqua Graphics , Plovdiv ISBN 978-619-7518-20-7 , which is presented as the main habilitation work and fully meets the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria;
- Publications are presented in indexed publications, in world-renowned databases of scientific information (Scopus and Web of Science), of which 7 with **IF** ;
- Presented 15 publications in non-refereed journals with scientific review or published in edited collective volumes .

In 8 of the presented articles, Dr. Penka Angelova Hristova is the first author. She is a leading researcher in 1 intra-university project and part of the team of 3 scientific intra-university projects, as well as 1 European project with a national program operator . Dr. Penka

Angelova Hristova presents in detail and correctly her personal contributions, most of which are of an original fundamental, scientifically applied and confirmatory nature . The scientific production shows a high contribution character.

According to the latest attestation sheet, protocol 6, dated 01.04.2025, Senior Assistant Professor Penka Angelova Hristova, MD, received a "Very good" rating.

IV. Evaluation of the monographic work or equivalent publications submitted for participation in the competition .

Dr. Penka Angelova Hristova has presented a monographic work on the topic "Physical Activity and Chronic Non-Communicable Diseases" 2026 Aqua Graphics , Plovdiv ISBN 978-619-7518-20-7, which is presented as the main habilitation work and fully meets the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria . The work contains a total of 1 24 pages . It is illustrated with 3 figures and 8 tables; well structured and based on an extensive literature reference (365 sources) by Bulgarian and foreign authors .

The presented monograph "Physical Activity and Chronic Non-Communicable Diseases" is dedicated to a topical and socially significant problem - the role of physical activity in maintaining health, prevention and complex impact on chronic non-communicable diseases. The relevance of the topic is undeniable, considering the high incidence of cardiovascular, metabolic, respiratory and oncological diseases and their significant importance for morbidity, disability and mortality. The author argues the choice of the topic in the introduction, defining low physical activity as a significant risk factor for a number of chronic diseases and emphasizing the possibility of physical exercise being used as a complementary prophylactic and therapeutic approach.

The monograph is structured logically and consistently. The initial sections present the basics of the bioenergetics of physical activity and the main adaptive changes in the body. This is followed by a detailed consideration of the impact of physical activity on the musculoskeletal, cardiovascular, respiratory, nervous and immune systems, as well as on the blood, digestion and metabolic processes. A separate place is devoted to recommendations for physical activity in different age groups and the features of exercise and sports in aging. This structure allows the reader to move from the physiological mechanisms of physical activity to its practical significance for the prevention of diseases.

A significant part of the work is devoted to socially significant chronic non-communicable diseases. Cardiovascular diseases, arterial hypertension, ischemic heart disease, chronic

respiratory diseases, obesity, diabetes mellitus, malignant diseases and osteoporosis are considered. Of particular interest are the sections on the characteristics of the "athlete's heart" and on low physical activity. In this way, the monograph successfully unites the physiological foundations of physical exertion with clinical and prophylactic issues.

The merit of the work is the author's attempt to consider physical activity not in isolation, but in the context of the complex interaction between modifiable risk factors. It is emphasized that a sedentary lifestyle, unhealthy diet, smoking and other adverse behavioral factors are associated with metabolic and pathophysiological changes such as obesity, hyperglycemia, dyslipidemia and arterial hypertension. At the same time, a significant amount of scientific data is summarized, showing the relationship between regular physical activity and a lower risk of cardiovascular diseases, type 2 diabetes, some neoplasms, osteoporosis, obesity and other chronic conditions.

The practical value of the monograph is enhanced by the presentation of recommendations for physical activity in different age groups. The recommendations of the World Health Organization for children, adults and the elderly are considered, which gives the work an applied focus and makes it useful not only for specialists in the field of physiology and sports medicine, but also for doctors, students, educators and other professionals involved in health promotion and prevention.

The analysis of low physical activity as an independent risk factor is particularly relevant. The data presented in the monograph show its contribution to total and cardiovascular mortality, as well as its relationship with ischemic heart disease, stroke, type 2 diabetes and some malignant diseases. This gives additional public health significance to the work.

The conclusion synthesizes the main messages of the work. The author emphasizes the need for a comprehensive and interdisciplinary approach to the risk factors for chronic non-communicable diseases and defines the stimulation of the population to increased physical activity as an important element of their prevention. The main beneficial effects of physical activity are deduced - improving cardiovascular and respiratory function, optimizing metabolism and body mass, supporting growth and development, and reducing the risk of chronic non-communicable diseases.

The monograph is distinguished by a wide thematic scope, interdisciplinary nature and a clearly expressed practical focus. The significant number of literary sources used allows the author to present the problem from different aspects and to connect the fundamental physiological mechanisms with their clinical and prophylactic significance. The work can be

useful both for teachers, researchers and medical specialists, as well as for students and specialists in the field of public health, sports medicine and physical education.

In conclusion, the monograph "Physical Activity and Chronic Non-Communicable Diseases" is a topical, meaningful and practically oriented scientific work. It systematizes a significant amount of information about the physiological effects of physical activity and convincingly outlines its place in the prevention and complex impact of chronic non-communicable diseases. The presented work has scientific, cognitive, educational and practical value and deserves a positive assessment.

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

According to the submitted lists and evidence from databases Dr. Penka Angelova Hristova has 16 citations in journals indexed by world-renowned databases (Scopus, WoS) . The candidate meets and exceeds the regulatory requirements for citation of scientific works (240 pts. with a norm of 200 pts.).

VI. Comprehensive, qualitative assessment of educational, methodological and teaching activities, including scientific supervision of students, doctoral students, and postgraduates.

From the beginning of her work at MU-Plovdiv until now, a significant part of Dr. Penka Angelova Hristova's professional activity has been related to teaching human physiology. She conducts a full course of training for students from various specialties, including medicine, dentistry, pharmacy, nursing , midwifery , rehabilitation, pharmacist assistant, medical laboratory assistant, X-ray laboratory assistant, public health inspector and dental technician. She also participates in the training of instructors in public health and nutrition and food safety. Along with her teaching activities, she participates in the preparation of manuals and tests in human physiology. Over the last 3 academic years, Dr. Penka Angelova Hristova has had classroom attendance as follows: Academic year 2022/23 – 1042.6 academic hours; Academic year 2023/24 – 1229 academic hours; 2024/25 – 964 academic hours at a rate of 360 academic hours.

VII. Critical notes and recommendations.

I have no significant critical remarks. I recommend that the candidate maintain his high publication activity and participate in the publication of textbooks and teaching aids for students, postgraduates and doctoral students in Bulgarian and English.

VIII. Overall assessment of the candidate's suitability against the minimum national requirements under Art. 2b, para. 2 and 3, respectively the requirements under Art. 2b, para. 5 of the Law on the State of the Republic of Bulgaria

GROUP OF INDICATORS	POINTS FOR AD "Assoc. Prof."	CANDIDATE POINTS
A	50	50
In	100	100
G	220	243.67
D	200	240
E	80	140
G	350	1090+1000=2090
TOTAL	1000 points	2863.67 points

I accept the scientometric values are not only sufficient, but exceed the required minimum. My comprehensive assessment of the teaching, teaching and scientific activities of Senior Assistant Professor Dr. Penka Angelova Hristova, MD is highly positive. The candidate meets the mandatory and specific conditions and scientometric criteria in the Law on the Education and Training of the Republic of Bulgaria and the Regulations of the Medical University - Plovdiv, for holding the academic position of "associate professor".

IX. Conclusion.

The materials submitted to me by the candidate for the competition show that Senior Assistant Professor Dr. Penka Angelova Hristova, MD meets all the requirements for the position of Associate Professor, in accordance with the Law on the Development of the Academic Staff of the Republic of Bulgaria, the Regulations for its implementation and the Regulations of MU - Plovdiv. The submitted scientific works and evidence of scientific and educational activities meet the quantitative and qualitative criteria.

I confidently give my positive assessment of Dr. Penka Angelova Hristova in the competition and propose to the esteemed members of the Scientific Jury to award Senior Asst. Dr. Penka Angelova Hristova, MD the academic position of "Associate Professor" in the field of higher education 7. Health and Sports, professional field 7.1. Medicine, specialty "Physiology ".

24 .08 .202 6

Prepared the review:

(Prof. Dr. Delyan Penev Delev, MD, PhD)

Заличено на основание
чл.5 §1, 6."В" Регламент (ЕС)2016/679