

TO
THE CHAIRMAN OF THE SCIENTIFIC JURY,
DETERMINED BY ORDER № 109-261 /23.06.2022
OF THE RECTOR OF THE MEDICAL UNIVERSITY – VARNA

REVIEW

by Prof. Dr. Krassimir Borisov Gigov, MD

**Professor of Disaster Medicine at the Department of Disaster Medicine and
Maritime Medicine, Faculty of Public Health, Medical University "Prof. Dr.
Paraskev Stoyanov"-Varna**

Subject: Procedure for occupying the academic position "professor" in the specialty "Disaster Medicine (marine medicine)", field of higher education 7. Health care and sports, professional direction 7.1. Medicine, one for the needs of the Department of "Disaster Medicine and Maritime Medicine " at the Medical University "Prof. Dr. Paraskev Stoyanov".

General presentation of the procedure.

I present this review in my capacity as an internal member of the Scientific Jury, appointed by Order No. 109-261 of 23.06.2022 of the Rector of the Medical University - Varna.

The materials presented to me regarding the competition procedure were prepared in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its Implementation and the Rules for the Development of the Academic Staff at the Varna Medical University .

Dimitar Georgiev Stavrev was born in the city of Varna, where in 1979 he completed his secondary education at the VII high school. In 1987, he graduated from higher education in medicine at VMI - Varna. From 1987 to 1990, he worked as a ward pediatrician in the General Toshevo Regional Hospital. From February 1990, after a competition, he joined the Varna Medical University as a teacher. In his professional development at MU-Varna, he successively went through the ranks of "assistant", "senior assistant", "principal assistant" and "associate professor". In the period 1990/1993, he specialized and defended his medical specialty in "Anatomy, Histology and Cytology" at the Medical University of Sofia - Sofia. From 2009 to 2011, he was a full-time doctoral student and obtained the educational and scientific degree "doctor" in scientific specialty: 03.01.02 "Anatomy, histology and cytology" from the Higher Attestation Commission (HAC). Obtained the Doctor of Science degree in 2021 at the

University of Varna. He passed a number of courses and qualifications, namely: "Modern methods of resuscitation in water accidents" at the Bulgarian Red Cross - 1996; "Health management in the conditions of health insurance" at the Institute of Management and Entrepreneurship - Sofia - 1999; Diplome de therapeutique homeopathique CEDH 0101 -2003, "Homeopathic therapy" TSORH, MU-Varna; "Fundamentals of diving and hyperbaric medicine" at the Military Medical Academy - 2008, BBAL - Varna; "Maritime instructor and teacher" at the Maritime Qualification Center - Varna/Maritime Administration - 2011; "Working with MS Office - Basic training" National Agency for Vocational Education and Training CPO at ET "MODUS TRADE" - 2012; "Emergency psychological help in critical/stressful situations." Institute of Social Activities and Practices - 2013; "Practical implementation of intellectual property protection. Inventions and Scientific Discoveries." MU-Varna - 2013; "Interactive learning methods" MU-Varna - 2013; "Assessment, Examination and Certification of Seafarers" Executive Agency Maritime Administration - 2019

In parallel with his research and teaching practice at the University of Varna, Assoc. Prof. Stavrev has been a guest lecturer in human anatomy at the University of Ruse since 2004, a lecturer at the NULC of the Bulgarian Red Cross, the manager of the "Home care" center and an instructor in the medical department at the courses for water rescuers at the RC of BRC-Varna, Director of the Center for Emergency Medical Assistance - Varna during the period 1998-2000.

In 2015, he was elected associate professor of Anatomy, Histology and Cytology at "Angel Kanchev" University of Ruse. In 2016, he was elected as an associate professor in the scientific specialty "Medicine of disaster situations (Marine Medicine)" at the Medical University "Prof. Dr. P. Stoyanov" – Varna.

Associate Professor Stavrev is involved in several projects, as follows: Health Sector Restructuring Project, Component 3: Emergency Medical Assistance. On-site training. - Manager under contract No. RD-10-39/23.07.1999. and №RD-10-40/23.07.1999; "Infrastructure for sustainable development in the field of marine research, tied to the participation of Bulgaria in the EURO-ARGO European infrastructure" - part of the National Road Map for Scientific Infrastructure, adopted by Decision No. 692 of September 21, 2010 of the Council of Ministers of the Republic of Bulgaria - Zam . coordinator for MU-Varna and member of the management committee; Project BG051PO001-1.1.09-0115 "BRC in support of labor integration through professional qualification of inactive persons" - "Qualification services and promotion of employment" Contract No. ESF 1109-03-02002 - Trainer; Project BG051PO001-3.3.07-0002 "Student practices" OP "Development of human resources", co-financed by the European Social Fund - Academic mentor; Project "Find a savior in yourself" No. OMDS14001161BH/23.04.2014 - Trainer; MSCA-NIGHT-2014: European Researchers, Night (NIGHT) – Expert; Project "Increasing the awareness of elderly people about responding to disasters, accidents, catastrophes and providing first aid" Contract No. 115000835 VN/22.06.2015 - Trainer. Project BG12MFOP001 - 4.025-004 "Promoting the heritage of the Black Sea" – Trainer.

He is the author of 170 real scientific publications on various aspects of medicine, including 8 textbooks, 8 books and monographs.

Assoc. Prof. Dimitar Stavrev participated in the competition with 2 monographs, 12 full-text articles (three of which are referenced and indexed in global databases), two book chapters with which the scientific library determines 290 points, exceeding the required minimum of 200 points according to scientometric indicators. Apart from them, the candidate submits an additional 14 articles with another 134.33 points. Citations and other metrics also qualify.

Research activity

The main directions in scientific research work are related to clarifying the main points of the impact of disaster situations and, in particular, the impact of the water and marine environment on the human organism. Study of the response models of social institutions in a crisis pandemic setting. Optimization of systems for medical and social protection of vulnerable groups of the population. Determining important aspects of the psychophysiological adaptation of the human organism when entering a water environment in a normal situation, in a simulated or real disaster situation. Historical-medical studies on the development of Bulgarian medical knowledge, on its actors from the city of Varna and Bulgaria, in general and specifically for their activities for the prevention and treatment of water trauma. Optimizing training models for maritime professionals with a view to reducing the effects of occupational stress and reducing the risk to their health when acting in crisis situations of incidents, accidents and disasters at sea. Study of specific aspects of anatomical knowledge, both in the teaching of the various medical specialties and in solving specific clinical-anatomical problems.

The monograph "Adapting the activities of the Home Care Center in the disaster situation of the COVID-19 pandemic" is presented as a habilitation thesis. The 134-page scientific work presents a contemporary topic dealing with an important social problem. The content is divided into 3 chapters with a total of 13 sections, 20 figures, 6 tables and 85 literature sources. Maintaining good practice in home care keeps the quality of life of the vulnerable group of home care service users as good as possible. The systematic approach, dynamic analysis and good organization are leading to the realization of the goals of home care. The fate of these people largely depends not only on the good attitude, qualification and humanity of medical and social workers, but also on the organization of work in social institutions. The work is distinguished by new ideas supported by evidence presented at a high scientific level and contains theoretical descriptions and a number of conclusions of practical interest.

The author presents a detailed analysis of the trends of the changing demographic situation in developed societies and in particular in Bulgaria. It presents the creation of structures providing the activity "Domestic care" by the BRC in Varna and describes in detail the "Program for the Development of Social Services" created by it. The impact of COVID-19 on public health, on the activities of the Home Care Center and the dynamic measures to adapt the social service management and delivery program are described. The analysis of digital data proves the effectiveness of the measures taken to reduce the impact on the lives of the elderly, preserving their lives and health. The monograph identifies and reveals the main problems

caused by the measures imposed by the temporary anti-epidemic situation. The nature of the work of each and every employee from the Home Care Center at the BRC-Varna is presented in detail, both in a normal situation and during the disaster. The actions imposed by the measures regarding the temporary anti-epidemic situation are described.

Contributions and significance of the developments of Assoc. Prof. Dimitar Stavrev, for science and practice

The follow-up of scientific and teaching activities presents the candidate as a well-rounded scientist who, based on rich theoretical training, seeks and finds practical solutions to a wide range of scientific and applied problems. Most of the conducted studies are carried out for the first time in our country, which is why the obtained results are of a significant contribution nature.

- In the thematic direction for **overcoming medical damages from disasters, accidents and catastrophes.**
 - o The medical aspects of disaster situations of different nature have been studied: epidemic situations, bioterrorism threats, fires, water disasters, etc.
 - o The main problems caused by the measures imposed by the temporary anti-epidemic situation related to the COVID 19 pandemic have been identified and revealed.
 - o Dynamic measures have been created and implemented to adapt the program for the management and delivery of an integrated health and social service aimed at a target group of vulnerable persons.
- In the direction of **Maritime Medicine with preventive measures and actions in maritime incidents related to water trauma.**
 - o Global and shared personal experience on the treatment and prevention of water trauma in accidents at sea is summarized and mechanisms and models for reducing medical injuries in water trauma at sea are presented.
 - o The medical aspects of extreme situations at sea in the world ocean and along the Bulgarian Black Sea coast were studied. All types of impacts of the sea on the human organism and possible traumas in the marine environment are tracked.
 - o The readiness of the population to provide assistance in case of water trauma was studied.
 - o Mechanisms are proposed for the inclusion of various structures in overcoming extreme situations with water trauma.
 - o Models of marine medical experiment, marine medical laboratory were created.
 - o Methodical materials and mechanisms have been developed to increase the competence of the population for actions in the event of marine accidents and for the provision of medical assistance in the event of water trauma.
- Direction **History of medicine.**
 - o The role of the Varna Medical Society in the development of health science and the culture of communication with the marine environment has been studied.
 - o All the actors of the Bulgarian health care who connected their professional activity with the city of Varna and the sea from the middle of the 19th century to the present have been studied.

- o The available sources for the development of the medical aspects of the impact of the marine environment on the human organism and, in particular, the development of this issue in Bulgaria were searched for and studied.

- o The development of medical approaches in water safety and in models of assistance in the marine environment are described, tracked and analyzed.

- Разработване на **специфични аспекти в обучението по анатомия** и в анализа на клинични проблеми.

- o Създадени са специфични програми за обучение по „Анатомия на човека“ на новите специалности Ерготерапия, Кинезитерапия, Лекарски асистент.

- o Създаден е линеен механизъм за обучение по „Анатомия на човека“ на специалност Медицинска сестра и е издадено съответно ръководство.

- o Изследвана е дейността на първия хистолог в България и създател на първата катедра по хистология.

- Development of **specific aspects in the teaching of anatomy** and in the analysis of clinical problems.

- o Specific training programs on "Human Anatomy" have been created for the new specialties of Occupational Therapy, Kinesitherapy, Medical Assistant.

- o A linear training mechanism for "Human Anatomy" for the Nursing specialty was created and a corresponding manual was issued.

- o The activity of the first histologist in Bulgaria and creator of the first department of histology was studied.

- Study of **the role and place of the Bulgarian Red Cross in the activities of providing assistance to the population in crisis situations** and beyond.

- o The establishment of the Bulgarian Red Cross Society in the city of Varna and the activities of providing assistance to the population in crisis situations have been researched and described.

- o The role and place of the BCK in the construction of the Water Rescue Service, the development of water safety methods and the provision of assistance in the event of accidents have been studied.

- o The activity of BRC-Varna in the medical and social direction in a disaster situation and beyond has been studied and described.

Teaching activity

Assoc. Prof. Stavrev's teaching activities are in "Anatomy, Cytology and Histology", "Marine Medicine", MBS and "Marine Health Care, Medical Care of Marine Facilities and Coastal Areas" for students from the many specialties in medical education. The reference for the study load represents the coverage of the required 100 hours per year, respectively:

- 2017/18 – 102 academic hours (6 hours working time/day)

- 2018/19 – 177 academic hours

- 2019/20 – 161 academic hours

- 2020/21 – 168 academic hours

Personal impressions, notes and recommendations.

I have known Assoc. Prof. D. Stavrev for many years and I have witnessed his development as a doctor and scientist. He is an authoritative member of the Varna Red Cross organization, and many of the organization's achievements are due to his sense of responsibility and high competence. His research activities support his dedication to disaster medicine and marine medicine in particular, which confronts him with a number of challenges, for the resolution of which he spares no effort and time. His drive to seek out new, unexplored or unsolved areas is one of his main traits as a scientist.

I have no objections to the substance.

CONCLUSION:

Assoc. Prof. Dr. Dimitar Stavrev, MD has the necessary theoretical training and sufficient accumulated practical experience to be able to formulate original hypotheses, conduct in-depth, comprehensive and at the same time targeted studies and analyzes to solve significant theoretical and practical problems by applying modern methods and tools. At the same time, he is a highly valued teacher at the University of Varna, in other universities in Bulgaria and in the BRC system. As such, it has made a significant contribution to the introduction of new disciplines in the creation of programs, teaching aids and teaching methods.

I confirm that the candidate in the competition - Assoc. Prof. Dr. Dimitar Stavrev, MD complies with the mandatory conditions under the ZRASRB in connection with the announced competition. He has indisputable merits as a teacher and researcher, with proven contributions in the scientific specialty of the competition. I clearly declare my positive opinion "FOR" the only participant in the competition for "professor". I vote with complete conviction, Assoc. Prof. Dr. Dimitar Stavrev, MD. to be elected and hold an academic position "professor" in the specialty "Medicine of disaster situations (marine medicine)", field of higher education 7. Health care and sports, professional direction 7.1. Medicine, one for the needs of the Department of "Disaster Medicine and Marine Medicine" at the Medical University "Prof. Dr. Paraskev Stoyanov".

30. 08. 2022.

Reviewer:



/ Prof. Dr. Krassimir Gigov, MD/