REVIEW

from

assoc. prof. Margarita Stankova, MD, PhD

Professional field 7.4. Public health New Bulgarian University

on the scientific works for application for the academic position of "Associate Professor", in professional field 7.4. Public Health, NBU announced in Darjaven vestnik no. 23 / 19.03.2021 candidate chief. assist. prof. Polina Mihova Mihova – Pavlova, PhD

Polina Mihova was born in 1982 and in 2000 she graduated from the Technical School of Electronics, Sofia, and in the same year she started her education at the New Bulgarian University at the Department of Biomedical Sciences. She graduated successfully in 2004 in Bachelor's degree in Computer Systems and Technologies in Medicine, followed by a Master's degree in Computer Technology in Biomedicine in 2006, and since 2005 she has been lecturer in the Bachelor's program in Natural Sciences, as well it's administrative director. In 2007 she took the academic position of "Assistant" - code 02.21.10 "Application of the principles of cybernetics in various fields of science - medicine, biocybernetics." She has defended her PhD thesis on "Telemedicine functions of the Medical Information System", and since 2010 she has held the position of "Chief Assistant" at the Department of Health care and Social Work. In 2020 she obtained a master's degree in Speech and Language pathology at the NBU. From October 1, 2016 to the present, she holds the administrative position of Director of the Program Council at the Department of Health care and Social Work.

Polina Mihova, PhD **fulfills the minimum national requirements** for scientific and academic activities in the field of higher education 7. Health and Sports, and Professional field: 7.4. Public Health and follows the National requirements and the requirements of the New Bulgarian University for the academic position "Associate professor".

Polina Mihova, PhD presents a monograph on "Applied software solutions in healthcare", which contains the following scientific and applied information: summary of the results of the analysis of the European Hospital Survey - Benchmarking Deployment of eHealth services (2012-2013), which analyzes: 1) ICT infrastructure, 2) ICT applications, 3) Health information exchange and 4) Security and confidentiality. The monograph studies the development of the computer industry in comparison with the penetration of information and communication technologies in medicine and health care from the 50s of the last century to the present times. Definitions are considered in detail and the development of e-health and telemedicine as a practical aspect of digital health care is traced. A practical SWOT analysis has been done of cloud computing service in medicine. The monograph presents a detailed overview and systematization of the total number of standards related to information technologies in medicine and healthcare. It should be noted that a significant contribution and innovation of the monograph of Polina Mihova, PhD dedicated to information systems in health care is the serious attention that had been paid for the first time to the user interface as a stimulating and important component of the system itself. The last document published on the European Commission's Directorate for public health and risk assessment, concerning legal regulation and standardization of e-health in member countries of the European Union was discussed, and detailed analysis on multiple parameters was presented adapted by a Bulgarian translation. The monograph also investigates the academic education in the field of information systems in medicine and healthcare and the development of university training in information technology in healthcare in Europe.

The monograph presented by Polina Mihova, PhD has also significant practical contributions - the results of three author's implemented information systems with different profiles demonstrated. An innovative idea of the author is the presentation of a Guide to Medical Informatics, which covers a list of terms in the field, resources, journals, academic institutions, scientific events, expert electronic materials, the most famous acronyms and professional organizations related to the scientific field of "medical informatics".

According to the scientific and practical requirements, the monograph presented by Polina Mihova, PhD fully meets the criteria for habilitation work and can be applied in the training and development of professionals in a focused and rapidly developing field of medical informatics.

In addition to her publishing work, Polina Mihova, PhD presents 7 articles in referred and indexed editions, 5 of which indexed in Scopus and two of them published in the last three years. There are 18 articles and reports published in non-referred journals with scientific review or published in edited collective volumes, /10 in English language/. The publications presented include research material in the field of technologies in healthcare and the introduction of new methods of working with children and adults with communication disorders. A significant contribution of Polina Mihova, PhD is her participation in two monographs with independent chapters, one of which is the prestigious international publication of NATO Science for Peace and Security Series - D: "Information and Communication Security".

According to the data from the citation reports Polina Mihova, PhD presents 3 citations in scientific journals, referred and indexed in world databases with scientific information / Scopus / and 14 citations in non-referred journals with scientific review.

In general, the presented scientific publications and citations meet the requirements of the application and represent a good request for future scientific and research activity in the field, as well as for future strong international presence with publications and citations in scientific journals.

Project work of Polina Mihova, PhD includes active participation in three international and two national projects in the professional field, which fully meets the requirements of the NBU for application for the academic position "associate professor". Participations in a projects in some other field of digitalization and other activities, as well as projects for Scholarship Funds, under "Actions for bilateral cooperation", which do not fall into the specific professional field, had also been presented. They demonstrate good skills for developing and applying for a project, participating in a project and working in a team, as well as skills for following a time frame, administrative discipline and preparing reports.

I firmly declare my satisfaction with our joint work on projects as one of the best examples of successfully completed three years DOOLEE international project "Development of online learning environment for eHealth", funded by the ERASMUS +1 enabled Polina Mihova, PhD to develop her expert work with the preparation of a new master's program in e-health - working with people with disabilities, participation in several national and international conferences and preparation of publications (some of which are currently in print). An important result of

participating in this project are the established partnerships with universities from Russia, Germany, Romania and Norway. Polina Mihova, PhD successfully develops and actively works for continued cooperation in other projects.

In summary, Polina Mihova, PhD demonstrates exceptional skills for teamwork and participation in the overall process of project preparation, implementation and reporting, as well as in the preparation and presentation of project results - presentations, papers and other publications.

Polina Mihova, PhD is a full-time lecturer in a number of courses in the field of computer and software solutions in the applied aspects of public health and speech and language pathology. For several years she has been conducting a general university course in Computer Literacy - compulsory for all newly admitted students. Her annual workload of lecture hours exceeds the requirements of her position every year. The courses she teaches are in two main professional fields - computer courses and courses dedicated to the application of computer technology in certain areas of public health, incl. speech and language pathology and developmental disorders. Polina Mihova, PhD is a lecturer in more than 5 courses in the English language programs in the Department of Health care and Social Work, which makes her one of the few specialists in Bulgaria in the field of technology that are applicable in working with children with developmental problems and adults with communication disorders. Her qualifications in speech therapy in combination with the technological skills and knowledge gives her exceptional opportunities to develop a narrow field of working with children and adults with communication disorders, which has gained place in the theory and practice in public health in recent years. Polina Mihova, PhD works very successfully with students from Cyprus, Greece and Turkey and she is very active in the development of master's and PhD programs in Speech and language pathology in English. In the feedback provided by students, it is noted that the grades for the courses conducted by Polina Mihova, PhD are consistently high, with very positive feedback given to the provision of materials in Moodle and visualization of the courses. Polina Mihova, PhD is a member of various professional and scientific associations.

The teaching activity of Polina Mihova, PhD is characterized by exceptional development in terms of course preparation, work in the electronic learning platform, working with international students. She is a very promising teacher who has a huge

potential to prepare, maintain and develop teaching activities and to contribute to the introduction of new programs, courses and teaching methods.

The administrative activity of Polina Mihova, PhD shows her exceptional skills for working in a team environment, working with students and maintaining and developing programs. Polina Mihova, PhD successfully worked for five years as Director of Program Council to the Department "Health care and social work " and correctly followed all the administrative duties. In addition to her active work on the programs, we must mention her participation in candidate student campaigns, her work with students in preparing their individual educational plans and her great efforts for an individual approach to each student solving his academic problems. Polina Mihova, PhD actively participates in the preparation and implementation of 4 new programs, two of which are in English language and is constantly working to improve and enhance the current programs in the Department of Health care and Social Work.

Polina.Mihova, PhD is the ERASMUS representative of the Department of Health care and social work and currently helps students in all programs of the Department and seeks opportunities for cooperation with international universities.

The administrative activity of Polina Mihova, PhD at the NBU shows an extremely active, and proactive teacher who has the skills to see in perspective, to develop and enrich the environment in which she works, to pay attention and time to each problem.

My personal impressions of Polina Mihova are entirely positive. I think she is conscientious, extremely hardworking and responsible person. Her teamwork skills make her a very valuable colleague, she enjoys respect and esteem in university environment. Polina Mihova has very good skills to develop and upgrade their knowledge and skills and apply them in the current and new environment, showing in the best way the results achieved. She is a fair partner at work, she has good listening and empathy skills and manages to work in a new environment.

Polina Mihova, PhD has the opportunity to function in a complicated environment, meeting deadlines and overcoming difficulties by demonstrating initiative and creativity, caring for everyone in the environment in which she works.

Conclusion: The candidate chief. assist. prof. Polina Mihova, PhD is a practical researcher with scientific achievements, a distinguished university lecturer with extensive experience (over 15 years), as well as with established administrative qualities. The overall publishing, research, teaching and public activity of Polina Mihova-Pavlova, PhD is a convincing motivation for her candidacy for the academic position of "Associate Professor" in the professional field 7.4. Public Health at the New Bulgarian University.

As a member of the Scientific Jury, I give my positive vote.

Sofia, July 15 2021

Signature:

/assoc. prof. Margarita Stankova, MD, PhD/

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