

## REVIEW

by Prof. Ivanka Ilieva Kostadinova, MD, PhD,

Professor in the Department of Pharmacology and Clinical Pharmacology of the Faculty of Medicine at the Medical University of Plovdiv

according to the procedure for occupying an academic position "Associate professor" in the specialty "Public health management (medicinal use and pharmacoconomics in health care)", area of higher education 7.0 Health care and sports professional direction 7.4. Public health,

with a candidate chief assistant, master of Pharmacy Miroslav Tsonkov Eftimov, PhD.

By order No. P-109-271/25.05.2023 of the Rector of the MU-Varna, a composition of the scientific jury was appointed according to the procedure for occupying the academic position "Associate professor" in the specialty "Public health management (medicinal use and pharmacoconomics in health care)", field of higher education 7.0 Health care and sports, professional direction 7.4. Public health,

In the announced contest, master of pharmacy Miroslav Eftimov has submitted all the documents, according to the requirements of The law and regulations for the development of the academic staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Staff of the Medical University of Varna. The materials are presented in chronological order, which enables me to accurately and objectively assess the overall activity of the candidate as a teacher and researcher.

### **Brief bibliographic data of the applicant:**

In 2004, Miroslav Eftimov graduated from the University of Varna as a Master of Pharmacy. From 2004 to 2008, he worked as a master pharmacist at ET "Ivelina Toncheva" in the city of Varna. From 2008 to 2017, he was an assistant in the Department of Pharmacology,

Clinical Pharmacology and Therapy of the Faculty of Medicine of the Medical University "Prof. Dr. P. Stoyanov" in the city of Varna. From 2017 to the present, he is the chief assistant in the same department. From 2013 to 2015, he was an independent doctoral student at the Department of Pharmacology, Clinical Pharmacology and Therapy of the Medical Faculty at the University of Varna. Acquired PhD" on 18.12.2015. with a thesis on "Pharmacological study of the effect of Aronia melanocarpa fruit juice in behavioral models in rats". In 2020, he acquired a specialty in Pharmacology and Pharmacotherapy. As of 11.05.2023, the candidate has experience in the specialty of 18 years, 07 months and 08 days, teaching experience of 14 years, 08 months and 04 days..

The reference of Miroslav Eftimov shows that the candidate has fulfilled the minimum national requirements under Art. 26, para. 5 of the Law and regulations for the development of the academic staff in the Republic of Bulgaria for occupying the academic position "Associate Professor".

Table 1 Reference for compliance with the minimum national requirements of the presented data for chief assistant Miroslav Eftimov, PhD

Group of indicators	Content	Academic position "Associate Professor" Number of points	Points for the activity of mag. pharm. Miroslav Eftimov
A	Indicator1	50	50
B	Indicator 3	100	104.21t.
G	Sum of indicators of 7 and 8	200	
D	Indicator 10	50	8/100/

The data presented in table 1 for Master of Pharmacy Miroslav Eftimov, PhD exceed the minimum requirements for the academic position "Associate professor".

### **General data on the scientific activity of chief assistant Miroslav Eftimov**

The documents presented in the competition are arranged correctly, completely and accurately. The total number of publications of Miroslav Eftimov is 53. Publications upon acquisition of PhD - 2 - in journals, refereed and indexed in world databases. Of them, 1 in a journal with an impact factor and 4 publications and reports in non-refereed journals.

In the competition for associate professor, the candidate participated with a total of 39 publications (as follows:

- Habilitation thesis - scientific publications in publications that are referenced and indexed in world-famous databases with scientific information - 10

- Scientific publications/abstracts in journals with SJR and/or IF (indexed in Scopus and/or Web of Science) – 6 full-text articles and 11 abstracts in journals in impact factor with total impact factor - 53.514.

- Scientific publications - referenced and indexed in Scopus - 18

- Scientific publications referenced in Web of Science – 20

- Articles published in non-refereed peer-reviewed journals or conference proceedings without IF and SJR (not indexed) – 17 issues

Out of 39 publications after the selection of chief assistant, the candidate is the first author of 7 of them, and the second or third author of 23. 28 of the publications are in English and 11 in Bulgarian. As of 27.07.2023, the number of citations noticed (42 - in SCOPUS, h-index -4 and 188 in Google Scholar, h-index -8). Table 2 shows the publication activity of chief assistant Miroslav Eftimov, PhD.

Table 2 Publication activity of the chief assistant Miroslav Eftimov, PhD

Proceedings	Peer reviewed in Scopus, WOS	(articles with an impact factor)	(Articles in non-refereed journals in world databases	Total
PhD	<b>2</b>	(1)	4	<b>6</b>
Chief assistant	<b>2</b>	-	6	<b>8</b>
Associate professor				
B4	<b>10</b>	(5)	-	<b>10</b>
G7	<b>10</b>	(10)		<b>10</b>
G8			15	<b>15</b>
B4			2	<b>2</b>
As of 27.07.2023	<b>2</b>	(1)		<b>2</b>
<b>Total</b>	<b>24</b>	(17)	<b>27</b>	<b>53</b>

The candidate participates in the competition with a habilitation thesis - 10 scientific publications in publications that are referenced and indexed in world-famous databases. and 27 publications, of which 10 are referenced in Web of Science. The scientific contributions of the presented works can be grouped thematically in the following priority directions for MU-Varna: Food and nutrition and Prevention, management of diseases and health systems. The importance of food for the prevention and treatment of socially significant diseases has been studied. It discovers desirable effects of biologically active substances of natural origin on various experimental models of socially significant diseases. In 24 publications effects of fruit juice of *Aronia melanocarpa*, aqueous and alcoholic infusions of *Cotinus coggygria*, infusions of the

leaves and wood of *Cotinus coggygria*, aqueous infusion of the seeds of *Kochia scoparia*, fruit juice of *Chaenomeles maulei*, anethole and chlorogenic acid were recorded. A model of postmenopausal changes in rats after ovariectomy was evaluated. The effects of ethanol on the oxidative stress of rats with its subchronic administration were evaluated. Of importance for clinical practice is the search in web-based databases of groups of drugs leading to hyperglycemia. Of interest are the established anxiolytic and antidepressant effects of aronia fruit juice in circadian disruption and ovariectomy, reduction of anxiety a *Aronia melanocarpa* fruit juice: increases bone density and hot plate pain threshold but does not affect changes in lipid metabolism in ovariectomized rats. Aqueous infusion of *Kochia scoparia* seeds improves spatial memory, has antidepressant and anxiolytic effects in a model of metabolic syndrome induced by a high-calorie diet. In a model of ovariectomy-induced postmenopausal changes, chlorogenic acid reduced weight gain, prevented the decrease in bone mineral density and osteoporotic hyperalgesia to heat, effects that could be exploited in the search for medicinal products improving quality of life during menopause. Improvement of spatial memory in metabolic syndrome after use of aronia fruit juice. Particular attention in Eftimov's scientific works is devoted to polyphenols, which are part of widely distributed plant species. In the first direction, Eftimov participated as a researcher in five intra-university projects financed by the "Science" fund of MU-Varna with the head and creator of this direction Prof. Stefka Valcheva-Kuzmanova, MD, Doctor of science. In the five intra-university projects of experimental models of inflammatory bowel diseases, behavioral models, models of metabolic syndrome and liver toxicity, the effects of compounds of plant origin are studied. The second direction of Miroslav Eftimov's scientific developments is aimed at public health - pharmaco-economic analyses of drug use and analyzes in occupational medicine. Pharmaco-economic analyzes are a valuable tool for determining the value of a new therapy and comparing it with other alternatives. The optimal use of funds in the treatment of socially significant diseases ensures greater efficacy and medicinal safety of the medicinal products used, improves the quality of life of the patients. A cost-effectiveness analysis of active cosmetic acne treatment complexes tested in an *in vivo* efficacy test was conducted. The analysis of morbidity and temporary incapacity enables the assessment of occupational risks and the introduction of measures and programs for safe working conditions. A retrospective analysis of morbidity and temporary incapacity in a construction company for the period 2019-2021 was carried out. It was found that cases of diseases of the musculoskeletal system and connective tissue are the most common cause of sick leave. The impact of COVID-19 on morbidity and temporary incapacity in a construction company for the period 2019-2021 was studied. It was found that COVID-19 did

not significantly affect the indicators of the frequency of cases and labor losses from all diseases, but it took a significant part of the morbidity among infectious diseases. diseases for the period 2019–2021 Registration of data in this direction will optimize preventive measures in order to reduce morbidity. The candidate has 37 participations in international scientific forums and 26 participations in national scientific forums. Miroslav Eftimov has received awards for the presentation of the results of his experiments: second and third place at international scientific forums and a diploma at a scientific event in Bulgaria, which is a positive assessment of the relevance and professional presentation of the obtained results of experimental studies. I personally know Miroslav Eftimov. I have excellent impressions of him as a person, teacher and researcher. Ambition, persistence, knowledge and professional skills are the basis of his activity as a researcher and teacher. Teaching and learning activity

Miroslav Eftimov, PhD has 14 years, 8 months and 4 days of teaching experience. He participates in the training of students of medicine, dentistry and pharmacy in pharmacology in Bulgarian and English, and students of the specialty "Health Management" in pharmacoeconomics. The candidate is the co-author of 4 teaching aids that are used in the training of students. On the table 3 presents the academic workload of the main assistant Miroslav Eftimov for the last 5 academic years.

Table No. 3 Study load of the chief assistant Miroslav Eftimov, PhD

School year	Exercises in Bulgarian	English language exercises	Total hours per academic year
2017/2018	392	301	693
2018/2019	310	272	582
2019/2020	283	222	505
2020/2021	205	265	470
2021/2022	334	273	607

From the submitted report on the candidate's academic workload, it is evident that the academic workload is twice as large as the accepted norm for Medical University of Varna. His

knowledge and skills as a pharmacologist help him in improving his qualifications as a teacher and scientist, in updating materials for educational activities.

**Conclusion:**

The achievements of the chief assistant Miroslav Eftimov in the evaluated areas meet the requirements of the and the rules for its application, as well as the Rules and conditions for acquiring the academic title "Associate Professor" at the MU-Varna. After getting acquainted with the scientific research and teaching activities of the candidate, I can summarize: As a result of the complex research, projects, cooperation with scientists from universities from Bulgaria Miroslav Eftimov achieves original results of a contributing nature with scientific-theoretical and practical significance. He is a scientist and teacher who has a desire for development and improvement. Has excellent communication skills, can work in a team in scientific and teaching projects. The assessment of the candidate's academic and teaching activity shows an excessive average annual academic employment. The participation of master pharmacist Eftimov in the development of topics for teaching aids confirms his professionalism and pedagogical skills. The excellent command of foreign languages helps the candidate to increase his qualifications as a teacher and scientist, in updating the materials for educational activities.

Based on the above and in accordance with the criteria of the "Law on the Development of the Academic Staff in the Republic of Bulgaria", the Regulations for the Organization and Activities of the University of Varna, I believe that the chief assistant Miroslav Eftimov. of academic development. I declare my positive opinion on the candidacy of master of Pharmacy Miroslav Eftimov. I am convinced to recommend to the members of the esteemed Scientific Jury to elect Chief Assistant Miroslav Eftimov for academic position "Associate.professor" in the specialty "Public health management (medicinal use and pharmacoeconomics in health care)", professional direction 7.4. Public health, area of higher education 7.0 Health care and sports.

Reviewer.....  
