TO
Prof. Dr. Stefka Valcheva-Kuzmanova, MD, PhD, DSc
Chairperson of the Academic Panel
for a competition for taking up the academic position "Associate Professor"
specialty "Pharmacology (including pharmacokinetics and chemotherapy)"

OPINION

by Assoc. Prof. Dr. Galya Tsvetanova Stavreva-Marinova, MD, PhD
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REGARDING: competition for taking up the academic position of "Associate Professor" in the field of higher education 7. Health and Sports, Professional field 7.1. Medicine, specialty "Pharmacology (incl. Pharmacokinetics and chemotherapy)" at the Department of "Pharmacology and Clinical Pharmacology and Therapy", promulgated in SG issue 61 / 23.07.2021

I present this opinion in my capacity as a member of the Academic panel, according to the Order of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna (№ P-109-396 / 20.09.2021) and decision of the first absentee meeting of the Academic panel from 04.10.2021.

PROCEDURAL MATTERS

The competition for the academic position of "Associate Professor" and the procedure for its holding are based on Art. 2b para 1 and 2 and art. 24 of the Law for Development of the Academic Staff in the Republic of Bulgaria; Art. 1a para 1, art. 2 para. 1, art. 53 and Art. 54 of the Rules for its application; Art. 123 and Article 125 of the Rule for the Development of the Academic Staff of Medical University - Varna (2018). I received in electronic form the necessary documents and materials under Art. 126 para. 1 and 2 of the Rule for the Development of the Academic Staff of Medical University - Varna.

The terms and conditions of the procedure are observed and complied with the regulations. The only candidate with PhD in Professional field 7.1. Medicine, specialty "Pharmacology (incl. Pharmacokinetics and chemotherapy)" is Dr. Silvia Gancheva Marinova, chief assistant in the same department.

I declare that I have no conflict of interest, including co-authorship with the candidate.

EDUCATION AND QUALIFIACATION

Dr. Silvia Gancheva graduated with excellent grades in 2007 from the Medical University of Varna, acquiring the educational degree "Master of medicine". Since February 2008 she has been working as an assistant in the Department of Pharmacology and Clinical Pharmacology and Therapy. She has acquired a specialty in pharmacology since 2017 (Diploma № 021028/07 July 2017, MUV series - 2017). She was enrolled as a PhD student in an independent form of education in 2015 in a PhD program in pharmacology with the topic of the thesis "Effects of vitamin K in an experimental model of metabolic syndrome". In 2018 she successfully defended the thesis and obtained the educational

qualification degree "Doctor" (Diploma № 301 / 21.12.2018) and occupied the academic position "Chief Assistant" in 2019.

Participates in the teaching of pharmacology and clinical pharmacology and therapy, is an administrative assistant in the department. Dr. Gancheva speaks English, has excellent computer skills, masters a wide range of experimental methods, and has competencies for working with analytical equipment.

She is a member of the Bulgarian Society of Pharmacology and the Bulgarian Society of Clinical Pharmacology.

EVALUATION OF THE IMPLEMENTATION OF THE MINIMUM NATIONAL REQUIREMENTS AND SCIENTIFIC PAPERS

The implementation of the minimum national requirements is a condition for admission to the procedure for the acquisition of academic positions, as a specific requirement in the Regulations of MU - Varna is at least 80 points to collect from articles in journals, referenced and indexed in WoS and/or Scopus (indicator G.7). The table below summarizes the scientific production with which Dr. Silvia Gancheva participates in the competition by indicators and points. The points of indicators G and D significantly exceed the requirements, and indicator G.7 carries 163, instead of the required 80.

Group of indicators	Scientific production	Assoc. prof (points)	Silvia Ganeva (points)
A	PhD thesis Effect of vitamin K in an experimental model of metabolic syndrome" MU - Varna, 2018	50	50
B	Habilitation thesis (monograph) "Kochia scoparia - the health benefits of an" ordinary "plant" Medical University - Varna, 2021 r. ISBN 978-619-221-336-6 COBISS.BG-ID- 47805960	100	100
G.7	Articles in scientific journals in WoS and Scopus – 10		163
G.8	Articles and reports in published in journals with scientific review – 6		41
Total score G		200	204
D	Citations in scientific journals in in WoS and Scopus – 14	50	210

Dr. Silvia Gancheva has indicated a list of 22 full-text articles and reports, 16 of which are given as evidence necessary to meet the minimum national requirements. The total impact factor of publications is 5,059. I emphasize that the articles supporting the educational qualification degree "Doctor" give 97.5 points, significantly exceeding the required 30 points.

OTHER SCIENTIFIC ACTIVITY

Dr. Silvia Gancheva has indicated a list of 48 participations in scientific forums from 2009 to 2020 - 18 abroad and 30 events in Bulgaria. Ten of the abstracts are published in supplements of scientific journals with an impact factor totaling 20,060. She has participated in 5 research projects funded by MU - Varna.

SCIENTIFIC CONTRIBUTIONS

The scientific contributions of Dr. Silvia Gancheva are based on targeted, well-planned, and performed experimental studies on vitamin K and osteocalcin, pharmacological effects of *Kochia scoparia,* and biologically active substances of natural origin in various experimental models. Of significant interest are studies proving the hormonal role of non-carboxylated osteocalcin and its participation in energy metabolism and in the regulation of behavioral and cognitive functions. A reproducible and efficient model of subclinical experimental vitamin K deficiency has been verified. For the first time, it has been found that the reduction of non-carboxylated osteocalcin by alendronate-induced suppression of bone resorption impairs some metabolic parameters and spatial memory. The involvement of osteocalcin in the regulation of carbohydrate metabolism was also confirmed in a cross-sectional study in patients with type 2 diabetes, and it was noted that the degree of carboxylation in humans is probably not significant in contrast to the results of animal studies.

Experimental studies of the effects of biologically active substances of plant origin are an essential part of the research work in the department, where the team has significant achievements and recognitions. Dr. Gancheva, as a member of this team, presents very interesting results about the effects of an easy to prepare form - an aqueous infusion of the seeds of the *Kochia scoparia* plant. The experiments demonstrated high biological activity with potential in the prevention and as adjuvant therapy of socially significant diseases, such as metabolic syndrome, type 2 diabetes, non-alcoholic liver disease, anxiety-depressive states, and cognitive changes. The presented monograph as a habilitation thesis to the greatest extent meets the regulatory requirements. In-depth literature data on anti-inflammatory, antiallergic, antitumor, antidiabetic, and antiobesity effects are supported and enriched with the results of her studies in healthy rats and those with metabolic syndrome. The results of the study of the effects of biologically active substances - eugenol and gallic acid in a model of experimental colitis, anethole on liver function, and anti-inflammatory effect of fruit juice from *Aronia melanocarpa* contribute to the researches in the department with scientific and practical importance in the search for new natural products in prevention and treatment.

Studies concerning potentially serious drug interactions among patients with psychiatric illness during inpatient and outpatient settings have made significant practical contributions. A high frequency of possible drug interactions with an impact on the health of patients and the effectiveness of the therapy has been proven. A study on the frequency and clinical relevance of potential drug interactions with statins confirms the importance of drugs that inhibit cytochrome P450 enzymes, as well as the ability of antidyslipidemic agents to increase the toxicity of short therapeutic drugs such as coumarins and digitalis drugs.

LECTURING ACTIVITY

According to the record submitted, for a period of five academic years, Dr. Gancheva delivered an average of 562.4 per year. She has more than 13.5 years of teaching experience in pharmacology. Dr. Gancheva teaches pharmacology and clinical pharmacology to students in Medicine BLE and ELE. She is a co-author of 4 published manuals: "Textbook of pharmacology for medical students", "Textbook of pharmacology for students of pharmacy", "Textbook of pharmacology for dental students Medicine"and" Collection of Test Questions in Pharmacology ".

The teaching activity of Dr. Gancheva corresponds to the requirements of the Regulations of MU - Varna (Art. 125, para. 1, 3).

CONCLUSION

Dr. Silvia Gancheva Marinova participates in this competition with a sufficient number of actual publications, significantly surpassing the minimum requirements for taking up the academic position "Ässociate professor" pursuant to the Law for Development of the Academic Staff in the Republic of Bulgaria and the Rules of Medical University – Varna. Her publications are in-depth, focused entirely in the field of pharmacology as an experimental and applied science, as well as her scientific competencies, skills, and interests. Her scientific articles have a high share of personal contributions and contain theoretical and applied contributions. Dr. Gancheva is a built recognized specialist, with accumulated high professional, teaching and language competence, research skills, and a sense of responsibility.

Based on the materials presented in the competition, as well as on my excellent personal and professional impressions, I propose to the honourable Academic Panel to vote in the affirmative for awarding to Dr. Silvia Gancheva Marinova, M.D., Ph.D. the academic position "Associate Professor" in the specialty "Pharmacology (incl. pharmacokinetics and chemotherapy)", Professional field 7.1. Medicine for the needs of the Department of Pharmacology and Clinical Pharmacology and Therapy of the Medical University – Varna.

Pleven
30.11.2021

Prepared by:
/Assoc. Dr. Galya Stavreva-Marinova, MD/