

To:

Career Development Department

MU-Varna

STATEMENT

From Associate Professor Maria D. Zhelyazkova-Savova, MD, PhD

Department of Pharmacology and Clinical Pharmacology and Therapeutics, MU-Varna

Member of the Scientific Jury appointed by order of the Rector of MU-Varna No P-109-396 from
20.09.2021

Subject

Announced competition (SG No. 61 / 23.07.2021) for the academic position of "**Associate Professor**", in the field of Higher Education 7. Healthcare and sports, professional field 7.1. Medicine and scientific specialty "Pharmacology" for the needs of the Department of Pharmacology and Clinical Pharmacology and Therapeutics, Faculty of Medicine at MU-Varna

Information about the procedure

With a decision of the Scientific Jury (meeting No.1/ 04.10.2021) I have been appointed to prepare an opinion on this competition.

The only candidate in the competition is Chief Assistant **Silvia Gancheva Marinova, MD, PhD.**

I have received from the Career Development Department at MU-Varna all the materials and documents necessary for the preparation of this opinion. The procedure is in compliance with the Law for the development of the academic staff in the Republic of Bulgaria (05.05.2018) and the Rules for the development of the academic staff in the MU-Varna (15.09.2020).

Professional data for the candidate

Dr. Silvia Ganchev Marinova was born on December 20, 1982 in the town of Silistra. She received her secondary education at the High School of Natural Sciences and Mathematics "St. Kliment Ohridski"-Silistra. She graduated medicine in 2007 at MU-Varna with excellent results.

She began her career in the Department of Pharmacology at MU-Varna, where she started as an assistant-professor in 2008. In 2017 she acquired her specialty in pharmacology. After a doctorate (2015-2018) she successfully defended a dissertation on "**Effects of vitamin K in an experimental model**

of metabolic syndrome" and acquired the educational and scientific degree "**Doctor**" in the scientific specialty Pharmacology. Since 2019 he has held the position of chief assistant-professor.

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

Dr. Silvia Gancheva is fluent in English.

Evaluation of quantitative and qualitative scientometric indicators

Dr. Gancheva presents in this competition with a **monographic work** (100 points) on the topic "**Kochia scoparia – the health benefits of an 'ordinary' plant**", 2021; MU Varna; ISBN 978-619-221-333-6 and her **PhD Thesis** (50 points)

Also presented are:

- Publications and reports in scientific journals referenced and indexed in world-famous databases with scientific information – 10 pieces (163 points), with 7 of them having an impact factor (IF) – total IF 25,119 and individual IF 7.696
- Publications and reports in unreferenced journals with scientific review or in edited collective volumes – 6 pieces (41 points)
- Full-text publications in scientific journals and collections, outside the minimum scientometric requirements for holding the AP "Associate Professor" – 3 pieces (11.48 points)

In 7 of the presented 19 publications, Dr. Silvia Gancheva is the first author, in 4 of them she is the second author and a subsequent author in the others. This fact speaks unequivocally about the active role of the candidate in the corresponding scientific production.

Dr. Silvia Gancheva is an active participant in 5 scientific research projects. She has participated in 48 scientific forums, 18 of which abroad.

The scientific interests of Dr. Gancheva are wide and diverse. The contributions from her research work can be regarded in the following areas:

- **"Vitamin K and osteocalcin"** This is where the most significant and original contributions have been achieved, with theoretical and applied significance (8 papers).
 - ✓ The research in this area is the leading part in the scientific production of Dr. Gancheva and represents a continuation of her PhD thesis, dedicated to the vitamin K dependent bone protein osteocalcin as a regulator of glucose homeostasis. The hypothesis of the hormonal role of osteocalcin in its non-carboxylated form has been tested and further confirmed in new experimental settings. The results revealed that drug-induced changes in the non-carboxylated osteocalcin levels (by chronic treatment of experimental animals with *warfarin* and *alendronate*) correlated with opposite metabolic changes and had an impact on psycho-cognitive parameters.

- ✓ Osteocalcin has also been studied in patients with type 2 diabetes, where the results partially support the experimental data, but also indicate some species differences in the metabolic activity of osteocalcin that might exist, particularly related to its carboxylated form.
 - ✓ An important contribution in this direction is the development and validation of a simple and reproducible model of metabolic syndrome in rats, used in this and other areas, and adopted by the department team in the implementation of other scientific tasks.
- **"Pharmacological effects of *Kochia scoparia*"** Dr. Silvia Gancheva shows a systematic and consistent approach in characterizing pharmacologically this common in our country, though little known plant in terms of its potential health benefits. Her own scientific results from the pharmacological studies on the aqueous infusion of *Kochia scoparia* seeds, together with a comprehensive and in-depth analysis of the available scientific literature on the biological activity of this plant, form the basis of the presented monographic work.
 - **"Drug Interactions"** This is the area where the interests of Dr. Gancheva in clinical pharmacology are manifested. Three papers are dedicated to potential drug-drug interactions based on clinical data about the therapy received by the studied population (patients with cardiovascular and psychiatric pathology). The role of drug-drug interactions in the occurrence of adverse drug reactions is a well-known risk factor, but is often underestimated or neglected in daily work; this is why these studies are of practical importance. A review on interactions with grapefruit juice as an example of drug-food interactions highlights another practical aspect of the problem.
 - **"Effects of biologically active substances of natural origin in different experimental models"** is a direction where the presented studies are related to broader topics developed in the Department, so they concern different products of plant origin, such as *eugenol* and *gallic acid* studied in a model of colitis in rats, or fruit juice from *Aronia melanocarpa* and *anethole* studied in a model of metabolic syndrome.

The scientific production of Dr. Silvia Gancheva is visible in the international medical community. Her works have been cited more than 90 times. As an example one of the articles (presented in the documents), published in the *International Journal of Experimental Pathology* in 2017, has 14 citations in scientific journals referenced and indexed in world-renowned databases.

Teaching and academic activity

Dr. Silvia Gancheva has 13 years of experience as a university teacher. At present, her study load is intensive and significant in volume, many times exceeding the normative regulations.

In terms of quantity in the last 5 academic years, according to the attached report, she has had the following school hours: 550 (for 2016/17), 697 (for 2017/18), 574 (for 2018/19), 496 (for 2019/20) and 495 (for 2020/21), at the background of a normative decision of the Academic Council of MU-Varna of 360 hours.

In terms of quality, Dr. Silvia Gancheva is engaged in practical seminars in Pharmacology with students majoring in "Medicine" (third-fourth year) and "Dental Medicine", as well as in Clinical Pharmacology with students majoring in "Medicine" (fifth year) at MU-Varna, including students from the English language program.

Conclusion

Dr. Silvia Gancheva is an established university lecturer and research scientist in the field of experimental and clinical pharmacology, with in-depth and serious training, and broad scientific interests. She has published in high quality scientific journals and has an impressive IF. She has the necessary experience as a teacher to hold the academic position of associate professor. Her ability to work with students brings her the recognition and respect of young people. Her scientific output in terms of volume and quality exceeds the requirements set by the Law for the development of the academic staff for this position. In human terms, Dr. Silvia Gancheva is an extremely hard-working, active, organized and effective person, dedicated to her work and responsible for her duties, sociable and positive, loved by her colleagues.

I have every reason to confidently give my vote in support of Dr. Silvia Gancheva in the competition for the academic position of "Associate Professor" for the needs of the Department of Pharmacology and Clinical Pharmacology and Therapeutics, Faculty of Medicine at MU-Varna, and I am doing it with pleasure and satisfaction.

11/30/2021

Varna

Assoc. Prof. Maria D. Zhelyazkova-Savova, MD, PhD

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