

SCIENTIFIC OPINION

by

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Regarding: Announced competition for the **academic position of “Profesor”** in the field of higher education “7. Healthcare and sports”, professional direction “7.4. Public health”, scientific specialty “**Public health management (management of the processes in pharmacology)**” for the needs of Department “Pharmacology, toxicology and pharmacotherapy”, Faculty of pharmacy, Medical University “Prof. Dr. P. Stoyanov” - Varna, published in the State Gazette, no. 41/03.06.2022

One candidate participated in the competition - Associate Professor Kaloyan Dobrinov Georgiev, Ph.D., associate professor at the University of Varna.

The candidate has submitted all necessary documents for participation in the competition, corresponding to the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its Application, and the Rules for the Development of the Academic Staff of the Medical University-Varna.

1. Candidate's career profile

Currently, the candidate is an associate professor in the Department of "Pharmacology, Toxicology and Pharmacotherapy" at the Faculty of Pharmacy of the Medical University "Prof. Dr. P. Stoyanov"-Varna.

Assoc. prof. Kaloyan Gerogiev obtained the educational and scientific degree "Master" in the specialty "Pharmacy" at the Faculty of Pharmacy, Medical University-Sofia in 2003. In 2010, the candidate upgraded his education by acquiring a specialty in pharmacology, and in 2018 – in dental pharmacy. In 2013, he successfully defended his PhD thesis in the field of bioorganic chemistry, chemistry of natural and physiologically active substances.

The candidate began his teaching activity in 2005, when he joined the Varna Medical University as an assistant. In 2014, the candidate was appointed to the position of "chief assistant", and a year later he became an associate professor, leading classes and lecturing on the disciplines "pharmacology", "toxicology", "pharmacotherapy", "fundamentals of clinical pharmacy" and " biopharmacy and pharmacokinetics". He speaks English, German and Russian.

Assoc. prof. Kaloyan Georgiev participated in 5 scientific projects, in two of which he was the leader.

2. Evaluation of the candidate's research and applied scientific activity

The publications and references submitted for participation in the competition show the high quality of the scientific output of Assoc. prof. Kaloyan Georgiev. For participation in the competition, one monograph, 14 scientific publications and reports in category G7, 7 items - category G8 and one published chapter of a collective monograph, which reflect the scientific research activity of the candidate during the period, are submitted.

The distribution of publications is in the following scientific areas, which are undoubtedly significant for public health:

- Regulatory aspects related to drug interaction studies – one monograph;
- Isolation, purification and analysis of plant fractions and extracts used in traditional medicine and determination of their pharmacokinetics and pharmacodynamics – 5 publications;
- Retrospective studies and analysis of potential drug interactions in patients, objects of polypharmacy - 2 publications;
- Description of clinical cases and therapeutic reviews - 3 publications;
- Retrospective studies of intoxications with medicines, drugs, pesticides, mushrooms, fish toxins and alcohols - 9 publications;
- Investigating the effects of probiotic strains - 1 publication and one chapter of a collective monograph (published by Elsevier).

All publications are correctly described and attached in full in electronic format to the competition materials.

In addition, the candidate provides information on participation in 14 scientific events held on the territory of the country, in which he participated with 12 posters and 6 oral reports. In the presented evidence, Assoc. prof. Kaloyan Georgiev is the first author in one report and one poster. The candidate has participated in 3 scientific forums abroad, and all participations (6) are with posters, of which he is the first author in two.

I believe that the personal contribution of the candidate in the presented works is available and proven, as well as his ability to participate in and lead scientific teams that participate in large-scale and useful research from a scientific and practical point of view.

Part of the publications (14 in number) were printed in renowned international publications with an impact factor or referenced in Scopus and/or Web of Science such as DARU journal of pharmaceutical sciences, SAGE Journals, BioMed International Journal, Clinical and Investigative Medicine, The Natural Products Journal, Journal of IMAB and Folia Medica. The candidate has also submitted publications and reports that have been printed in non-refereed, peer-reviewed journals or published in edited collective volumes – 7 in number, as well as a published chapter of a collective monograph in an Elsevier publication.

The scientific research activity and scientific contributions of Assoc. prof. Kaloyan Georgiev, are in the field of the scientific specialty of the announced competition and cover topics important for public health, such as regulatory aspects of the rational use of medicines (drug-drug interaction studies), drug intoxication studies, drugs, pesticides, fungi, fish toxins and alcohols, studies of the effects of probiotic strains, as well as descriptions of clinical cases of high scientific-practical value.

The scientific parameters of Assoc. prof. Kaloyan Georgiev exceed the minimum requirements. So e.g. according to indicators G5-9, with a mandatory minimum, the candidate has 235.8 points, according to indicator D10 – 135 points, according to indicators E13-E22 – 330.86 points (with a minimum of 80 points). Full-text publications in scientific journals and collections, beyond the minimum scientometric requirements for occupying the administrative position of "professor", are also presented.

As more significant contributions of the candidate in the above-mentioned areas of his scientific interest, I can single out:

- The contributions of the monographic work, which summarizes all the stages through which a newly developed medicines must pass for the evaluation of drug-drug interactions in the preclinical and clinical stages, preceding the marketing authorization by the regulatory agencies;
- Contributions related to isolation, purification and analysis of plant fractions and extracts used in traditional medicine and determination of their pharmacokinetics and the risk of drug-drug interactions with conventional drugs. In this regard, some PK studies have been conducted for the first time and PBPK models have been developed to predict potential interactions of practical importance. There are also scientific and applied contributions related to the development and validation of an HPLC-UV method for the qualitative and quantitative determination of EGCG, (+) catechin, gallic acid and caffeine in Japanese Bancha green tea samples, as well as the development and validation of the HPLC-UV method for qualitative and quantitative determination of sildenafil in plasma samples from experimental animals;
- For the first time, studies were conducted to determine the organoprotective effect of a methylxanthine fraction isolated from Bancha on models of cardio- and nephrotoxicity induced using doxorubicin in rats;
- For the first time, phenolic compounds were isolated and analyzed from plum fruit extract using PC, TLC and HPLC. The pharmacological effects of the extract were also determined;
- For the first time, the antiviral effects of *Lycium barbarum* extract and methylxanthines isolated from Bancha and Pu-erh on the reproduction of HSV-1, poliovirus 1 and coxsackie virus were investigated;
- The scientific-practical contributions related to the retrospective studies and the analysis of potential drug-drug interactions in patients with polypharmacy, as well as the description of clinical cases and therapeutical reviews;
- The retrospective studies of mushrooms, medicinal products, pesticides, fish toxins and alcohols, in which for the first-time acute poisonings with narcotic substances, benzodiazepines and hypnotics in the Varna region were investigated for a 25-year period (frequency, dynamics, etiological structure, mortality and demographic characteristics);
- Individual protocols for the duration of hospital treatment of patients with acute exogenous intoxications with organophosphate pesticides have been developed. For the first time, a study of mushroom poisonings in the Varna region over a period of 25 years was carried out, analyzing their frequency, distribution by gender and age, clinical course, therapeutic behavior, and mortality;

- The studies on the activity of probiotic strains, in which the hepatoprotective effects of a probiotic feed containing strains of Lactobacillus and Streptococcus were investigated for the first time in acutely induced hepatotoxicity in rats.

3. Teaching activity

The educational and teaching activities of Assoc prof. Kaloyan Georgiev, began in 2005 as an assistant at the University of Varna, Department of "Preclinical and Clinical Pharmacology, Chemistry and Biochemistry". Ten years later, he obtained his habilitation. His total teaching experience is more than 16 years.

The candidate has two successfully defended doctoral students, participation in two national scientific/educational projects, as well as being the head of two national scientific/educational projects at the Science Fund, MU-Varna. There are 3 published study guides that are used in university studies. Participates in the training of specialists in "Pharmacology and Pharmacotherapy", "Clinical Pharmacy" and "Hospital Pharmacy". Currently, Assoc. prof. Kaloyan Georgiev is the scientific supervisor of 6 doctoral students.

From the provided reference on the study load, it is apparent that the load includes both lecture material and exercises.

4. Conclusion

The summarized analysis of the above-presented aspects of the scientific and teaching activity of Assoc. prof. Kaloyan Georgiev show that the scientometric indicators, professional qualification and authority of the candidate fully meet the requirements of the Regulations on the Terms and Procedures for the Acquisition of Scientific Degrees and Tenure in the academic position of Professor at Medical University "Prof. Dr. P.Stoyanov"-Varna.

For this reason, as well as due to my excellent personal impressions of Assoc.prof. Kaloyan Georgiev I recommend to the respected members of the Scientific Jury to vote positively for the appointment of the candidate Assoc. prof. Kaloyan Georgiev to the academic position of Professor for the needs of the Department of "Pharmacology, Toxicology and pharmacotherapy" at the Faculty of Pharmacy, at the Medical University "Prof. Dr. P.Stoyanov"-Varna.

City of Sofia,
11.10.2022

Signature:



Prof. Asena Serbezova, PhD