

REVIEW

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Subject: Competition (announced in the State Gazette issue 47/04.06.2024)
for occupying of one academic position of "Professor" in "Pharmacology (including
pharmacokinetics and chemotherapy) " in the field of higher education
7. "Healthcare and Sports", professional direction 7.1. "Medicine",
for the needs of the Department of Pharmacology and Clinical Pharmacotherapy,
at Medical University – Plovdiv

By order of the Rector of MU – Plovdiv R-1972/07.08.2024 I was elected a member of the Scientific Jury, and by decision of the first meeting of the Scientific Jury from 12.08.2024 (Protocol №1) I was elected to prepare a review on the procedure for occupying one academic position "Professor" in "Pharmacology (including pharmacokinetics and chemotherapy) " in the field of higher education 7. "Healthcare and Sports", professional direction 7.1. "Medicine", for the needs of the Department of Pharmacology and Clinical Pharmacology, at Medical University – Plovdiv. Documents for participation in the competition were submitted by 1 candidate - Assoc. Prof. Delian Penev Delev, MD, PhD.

I. Analysis of the candidate's career profile.

Assoc. Prof. Dr. Delian Penev Delev was born in the city of Plovdiv on August 14, 1976. In 1995, he graduated from the Plovdiv Language High School. From 1995 to 2001, he studied at Medical

University – Plovdiv, where he graduated as a medical doctor. Since 2006, he has worked in the Department of Pharmacology at Medical University – Plovdiv successively as an Assistant Professor (2006-2013), Chief Assistant Professor (2013-2016), Associate Professor (from 2016 to the present), and since 2020 he has been Head of the department. In 2013, Assoc. Prof. Delev obtained the educational and scientific degree "Doctor" after a successfully defended dissertation on the topic "Influencing andropause in an experiment". Assoc. Prof. Delian Delev has a specialty "Pharmacology" (2012). He is a Master of Public Health and Healthcare Management (2015).

The candidate is a member of numerous organizations: Bulgarian Medical Union, Bulgarian Society of Pharmacology, Clinical Pharmacology and Therapeutics (member of the Board of Directors); European Association for Clinical Pharmacology and Therapeutics, Union of Scientists in Bulgaria and Bulgarian Society for Simulation Medicine. Assoc. Prof. Delev possesses administrative and management experience: Chief Administrative Assistant Professor of the department, former Chairman (two mandates) of the Youth Scientific Society "Asclepius", member of the Faculty Council of the Medical Faculty of MU-Plovdiv, quality expert at the University Quality Commission of MU-Plovdiv, member of the Board of Directors of Confederation of Independent Trade Unions of Bulgaria. Assoc. Prof. Delev has been for a long-time an editor of the journal published by MU-Plovdiv – Folia medica. He is a member of the State Examination Commission at Ministry of Health for conducting examinations for the acquisition of a specialty in "Pharmacology and pharmacotherapy".

The candidate has extensive language competence in English (excellent, C1), German (very good, B2) and Russian (good). He has computer skills in word processing, graphical and statistical programs (Word, Excel, PowerPoint, SPSS).

II. General description of the materials submitted in the competition.

The documents provided for the competition are in accordance with the Act on Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the implementation of the Academic Staff Development Act and the Regulations for Academic Development at MU-Plovdiv (2021). The documents are prepared very precisely and are well organized.

III. Evaluation of the candidate's scientific works for the overall academic development.

Assoc. Prof. Delian Penev Delev, MD, PhD, participates in the competition with:

1. Dissertation for awarding the educational and scientific degree "Doctor" on the topic: "Influencing andropause in an experiment", 2013, Medical University – Plovdiv;
2. Habilitation work (monograph): Delian Delev. "Selected adverse drug reactions and interactions", 2023. Medical University – Plovdiv. ISBN 978-619-237-108-1;
3. Publications and reports published in scientific journals, referenced and indexed in world-famous databases with scientific information (Scopus and Web of science) – 27 in number;
4. Publications and reports published in non-refereed journals with scientific review or in edited collective volumes – 28 in number.

The total number of publications with which Assoc. Prof. Dr. Delian Penev Delev participates in the competition is 55, which significantly exceeds the requirement of the Regulations for Academic Development in MU-Plovdiv (2021) for a total of 20 publications. The full-text publications in scientific journals, referenced and indexed in world-famous databases with scientific information (Scopus and Web of science) deserve special attention. They are totally 27, of which 14 are in journals with an impact factor, while the requirement of the Regulations for Academic Development at MU-Plovdiv (2021) is respectively for 15 publications in refereed scientific journals, of which 8 with an impact factor. The international journals with an impact factor are: *International Journal of Clinical and Experimental Medicine*, *Acta Histochem.*, *International Journal of Pharmaceutical and Clinical Research*, *Cell Tissue Bank*, *Biomed Pharmacother.*, *Iran J Basic Med Sci.*, *Medicina (Kaunas)*, *Eur J Ophthalmol.*, *Trop J Pharm Res.*, *Pharmacia*. The publications in which Assoc. Prof. Dr. Delev is a co-author are devoted to a variety of issues. The successful publication activity in scientific journals, referenced and indexed in world-famous databases with scientific information (Scopus and Web of science) proves the scientific contribution and significance of the research of the teams in which the candidate participated.

The scientific research of Assoc. Prof. Dr. Delev is very diverse and includes numerous scientific results obtained through experimental pharmacological studies, as well as results from clinical studies on patients. The pharmacological research in experimental animals has been carried out through very intensive experimental work within the framework of 6 intra-university projects

(since 2015), one of which is managed by the candidate. Experimental studies in these projects are devoted to: the anti-inflammatory activity of newly synthesized pyrrole compounds; the effects on dopaminergic mediation of two antiparkinsonian drugs – pramipexole and tolcapone; the effects of cholecalciferol on experimental models of impaired memory, neuro- and systemic inflammation; the adaptogenic and neuroprotective action of cannabidiol, as well as the effects of plant products – an extract of *Sideritis scardica*, Lamiaceae, and an extract of *Micromeria frivaldszkyana* (Degen) Velen. Lamiaceae.

The contributions of the scientific research with which Assoc. Prof. Dr. Delev participates in the competition are grouped into three directions. They are very diverse, which shows the rich experience of the candidate as a researcher and scientist, as well as his many scientific interests.

The first direction is: *Contributions related to a pharmacological study to influence andropause in experimental settings*. Important results of an original nature showing the effects of testosterone propionate replacement therapy have been studied in this direction. In young rats after orchietomy, the replacement therapy stimulated leukopoiesis, kept blood glucose levels unchanged, did not lead to changes in the activity of serum transaminases, caused a negative correlation between the values of melatonin and testosterone in the serum. In adult male rats, elevated LDH activity was normalized by testosterone propionate replacement therapy. Changes in calcium levels with chronic testosterone propionate treatment of orchietomized animals necessitates monitoring of calcium levels in adults on long-term replacement therapy. In this direction, there are also numerous contributions of a confirmatory nature. Testosterone propionate replacement therapy increased the number of erythrocytes and stimulated thrombocytopoiesis; decreased serum cholesterol and triglycerides and did not increase PSA values, and glucose levels decreased in orchietomized and aged rats treated acutely with testosterone propionate.

In this direction, the candidate presents 25 publications, as well as a dissertation work for the acquisition of the educational and scientific degree "Doctor".

The second direction is: *Contributions in relation to the monograph "Selected Adverse Drug Reactions and Interactions"*. The monograph describes the most common and significant adverse drug reactions and drug interactions. The contributions in this direction are discussed in the section: IV. Evaluation of the habilitation work (monograph).

The third direction is: *Contributions related to the scientific supervision of doctoral students.*

Assoc. Prof. Dr. Delian Delev is the supervisor of three doctoral students who have successfully defended their dissertations. Together with Prof. Ivan Kanchev, he is the scientific supervisor of Lidiya Dochkova Shamova for the defense of a dissertation on the topic: "Bilingualism in Catalonia – essence and specificity". The conducted empirical sociolinguistic research proved that in the 21st century bilingualism is widespread among the Catalan population and modern Catalans have built their society on the basis of tolerance and freedom of language choice. So far, in the Bulgarian linguistic literature, there is no detailed description of the proposed modern language situation and the reasons that led to bilingualism in Catalonia. The proposed empirical studies could facilitate the work of teaching teams in the development of future projects related to the study and dissemination of certain linguistic codes.

In connection with this dissertation, Assoc. Prof. Dr. Delev is the co-author of 2 publications.

The second doctoral student who successfully defended his dissertation, supervised by Assoc. Prof. Delev, is Nikolay Borisov Yanchev, with the topic of his dissertation: "Experimental pharmacological study of an extract of *Sideritis scardica*, Lamiaceae". Important contributions of scientific-theoretical and scientific-practical importance were obtained. For the first time, an anxiolytic effect of an extract of *Sideritis scardica* was proven in models of acute and chronic stress, and a neuroprotective effect of the extract was established in various models of memory impairment. For the first time in an experiment, a relationship between the development of anxiety and increased levels of proinflammatory cytokines was proven. Studies have demonstrated a dose-response effect of *Sideritis scardica* extract. The experimental studies carried out with the extract of *Sideritis scardica* are a prerequisite for conducting clinical studies with it.

In connection with this dissertation, Assoc. Prof. Dr. Delev is a co-author of 6 publications.

Together with Prof. Dr. Miroslava Nikolova Bosheva, Assoc. Prof. Dr. Delian Delev, is the scientific supervisor of Boris Petrov Angelov (the third doctoral student who successfully defended his dissertation) with the topic: "Therapeutic possibilities in acute bronchiolitis for children up to two years of age". Innovative for the country, an important study of children up to 2 years of age with acute bronchiolitis was conducted with an emphasis on the clinical course, complications and therapeutic options for dealing with the disease. An original contribution is that effective therapeutic options were derived depending on the age of the patients – 0-6 months, 7-12 months.

and 13-24 months, with effective, cost-saving and safe recommendations for the treatment of children with acute bronchiolitis up to 2 years old, depending on their monthly age.

IV. Evaluation of the habilitation work (monograph).

The monograph "Selected Adverse Drug Reactions and Interactions" is a very useful, up-to-date, well-structured book, with a volume of 177 pages. It is devoted to two very relevant problems: adverse reactions to drugs and drug interactions, as a potential cause of serious adverse consequences for the patient. Assoc. Prof. Dr. Delev is the independent author of the monograph. In the first chapter of the monograph, the author, with extensive experience in teaching clinical pharmacology, describes clinical trials – their phases and design, as a source of data on adverse drug reactions and drug interactions. The second chapter is devoted to adverse drug reactions – classifications, seriousness, adverse reactions from selected groups of drugs, pharmacovigilance and methods for monitoring adverse drug reactions. The third chapter is devoted to drug interactions. In this chapter, the author provides a definition of clinically significant drug interactions, gives a classification of interactions based on their predictability, provides a classification of drug interactions based on the pharmacokinetic level of occurrence with relevant examples, as well as important interactions between drugs acting on the central nervous system. In the fourth chapter of the monograph, the adverse effects on the liver caused by drugs are systematized, and the drugs with potential hepatotoxicity, the risk factors for the manifestation of liver damage, the clinical characteristics of drug hepatotoxicity, as well as the possibilities for its treatment and prevention are discussed. In the fifth chapter of the monograph, drug-induced lung disease is described, the clinical manifestations of adverse drug reactions on lung function are discussed, as well as the main drugs that cause them, and the mechanisms of these adverse reactions are discussed.

The monograph is based on a comprehensive review of the available literature, with 152 cited references. It demonstrates Assoc. Dr. Delev's ability to combine data from the literature with his extensive experience in order to select the most significant information and present it in a well-structured monograph that can be of use to physicians, pharmacology trainees, and medical students.

The monograph has been reviewed by two reviewers and fully complies with the requirements of Act on Development of the Academic Staff in the Republic of Bulgaria for a habilitation work.

V. Reflection (citation) of the candidate's publications in the national and foreign literature (publication image).

Assoc. prof. Dr. Delian Delev presents references of citations, according to which 27 of his publications have a total of 178 citations in scientific journals, referenced and indexed in Scopus and/or Web of Science, and 4 of his publications have 6 citations in non-refereed peer-reviewed journals. According to this indicator, Assoc. Prof. Dr. Delev almost 7 times exceeds the requirements set out in the Regulations for Academic Development at the Medical University – Plovdiv, and with the required 400 points, he has 2700 points. The citations of the publications in which Assoc. Prof. Dr. Delev is an author/co-author show the high scientific interest to them and testify to the innovative nature of the scientific research.

VI. Comprehensive, qualitative assessment of teaching activities.

Assoc. Prof. Dr. Delian Delev has over 18 years of teaching experience as an assistant professor, chief assistant professor and associate professor in Department of Pharmacology and Clinical Pharmacology at Medical University of Plovdiv. He participates in the teaching of pharmacology and clinical pharmacology in the Faculty of Medicine, in the Faculty of Dental Medicine and in the Faculty of Pharmacy at MU – Plovdiv, delivering lectures in Bulgarian and English, as well as leading practicals/seminars in Bulgarian and English. He participates in conducting of semester exams in the Faculty of Medicine and in the Faculty of Dental Medicine.

Assoc. Prof. Dr. Delian Delev skilfully combines his diverse activities: teaching, organizational, leadership and expert, and that at the background of a huge academic workload. The academic load report from the last 3 academic years shows that Assoc. Prof. Dr. Delev had an average annual academic workload that significantly exceeded the requirement: 2020/2021 – 759 hours of classroom activities (156 hours of lectures + 312 hours exercises/seminars + 291 hours of exams), 139 hours of scientific work and 130 hours of extracurricular activities; for 2021/2022 – 556 hours of classroom activities (220 hours of lectures + 252 hours of exercises/seminars + 84 hours of

exams), 137 hours of scientific work and 150 hours of extracurricular activities; for 2022/2023 – 602 hours of classroom activities (152 hours of lectures + 383 hours of exercises/seminars + 67 hours of exams), 195 hours of scientific work and 70 hours of extracurricular activities.

Assoc. Prof. Dr. Delian Delev is the co-author of 6 university textbooks and 8 university manuals, among which are 3 editions in English (*Basic and Clinical Pharmacology with Toxicology and Pharmacology* and *Handbook for Medical and Dental Students* – 2 editions) for medical students, dental students, pharmacy students and assistant pharmacists. He is also one of the editors of 4 of the manuals.

Assoc. Prof. Dr. Delev is the supervisor of the specialization of 1 specialist in "Pharmacology and Pharmacotherapy". He participated as a lecturer in the course of the postgraduate training "Oncopharmacology" in 2024.

VII. Critical remarks and recommendations.

I have no critical notes. I recommend Assoc. Dr. Delian Delev to continue to work diligently, to continue his multifaceted research work, to teach students and doctoral students with his inherent enthusiasm and diligence, and to create followers.

VIII. General assessment of the candidate's compliance with the minimum national requirements of Act on Development of the Academic Staff in the Republic of Bulgaria and the Regulations for academic development at MU-Plovdiv (2021).

A group of indicators	Content	Minimum requirements of MU-Plovdiv for "professor" (points)	Presented evidence of Assoc. Professor Dr. Delian Delev in the competition for "professor" at MU-Plovdiv (points)
A	Indicator 1	50	50 Indicator 1. Dissertation work for the award of the educational and scientific degree "doctor"

C	Indicators 3 or 4	100	100 Indicator 3. Habilitation thesis – monograph
D	Sum of indicators from 5 to 9	300 points 20 articles, of which 15 in journals referenced in Scopus and/or Web of Science, incl. 8 articles with IF	242,84 (27 articles, of which 14 are with IF) Indicator 7. Publications and reports published in scientific publications, referenced and indexed in world-renowned databases of scientific information + 229,12 Indicator 8. Publications and reports published in non-refereed peer-reviewed journals or published in edited collective volumes Общо: 471,96
E	Sum of indicators from 10 to 12	400 точки 25 цитирания в списания, реферирани в Scopus и/или Web of Science	2670 Indicator 10. Citations in scientific publications referenced and indexed in world-renowned databases of scientific information or in monographs and collective volumes + 30 Indicator 12. Citations in non-refereed peer-reviewed journals Total: 2700
F	Sum of indicators from 13 to the end	150 points - 2 PhD students - 1 scientific project - 1 textbook / teaching manual	100 Indicator 14. Supervision of a successfully defended doctoral student (n is the number of co-supervisors of the corresponding doctoral student) + 40 Indicator 15. Acquired medical specialty +

			<p>40</p> <p>Indicator 17. Participation in an international scientific or educational project</p> <p>+</p> <p>12,7</p> <p>Indicator 20. Published university textbook or textbook that is used in the school network</p> <p>+</p> <p>11,12</p> <p>Indicator 21. Published university textbook or textbook that is used in the school network</p> <p>+</p> <p>30</p> <p>Indicator 22. Training of interns, specialists and doctoral students (seminars and practical classes)</p> <p>Total: 213,82</p>
G	Teaching activity (lectures and exercises)	300 points (for the latter 2 years X 1 p/hour)	1158
	Academic position	200 points (associate professor - 100 items for 1 year)	800
		Total: 1500	5513,78

As can be seen from the table, Assoc. Prof. Dr. Delian Delev, PhD, fully meets the minimum national requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria

and almost four times exceeds the specific requirements of MU – Plovdiv, defined in the Regulations for Academic Development at the Medical University – Plovdiv.

IX. Conclusion

The presented data on the teaching, research, organizational and leadership activities of Assoc. Prof. Dr. Delian Delev, PhD, show that he significantly exceeds the requirements for occupying the academic position "Professor" according to the Law on Development of the academic staff in the Republic of Bulgaria and the Regulations for academic development at the Medical University - Plovdiv.

The scientific activity of Assoc. Prof. Dr. Delian Delev exceeds the legal requirements. It is characterized by diverse issues in the field of experimental pharmacology, clinical medicine and sociolinguistics. Assoc. Prof. Dr. Delev demonstrates competence in conducting diverse scientific research as a leading researcher and supervisor of doctoral students. He has a high publication activity, successful publication of scientific works in specialized scientific journals and numerous citations in the international scientific literature.

Assoc. Prof. Dr. Delyan Delev has many years of academic experience in teaching pharmacology and clinical pharmacology in Bulgarian and English, teaching students from various specialties. He is a highly qualified teacher, with many years of experience and a huge academic load, many times exceeding the requirements. He participates as a co-author and editor in writing pharmacology and clinical pharmacology textbooks and manuals for students, in conducting semester exams and state exams for acquiring a specialty. He successfully combines many diverse activities as a teacher, head of department, supervisor of doctoral students and specialists.

I know Assoc. Prof. Dr. Delev and I have excellent impressions of his qualities as a colleague, teacher and scientist – diligence, hard work, responsiveness, cordiality, willingness to work in a team, friendliness, correctness.

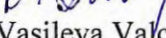
Based on the objective facts and my personal impressions, I give my positive assessment and confidently assert that Associate Professor Dr. Delian Penev Delev, PhD, fulfills all the requirements and possesses all the qualities necessary to occupy the academic position of "Professor" in "Pharmacology (incl. pharmacokinetics and chemotherapy)" in the field of higher

education 7. Healthcare and sports, professional direction 7.1. Medicine, at the Department of "Pharmacology and Clinical Pharmacology" at MU – Plovdiv.

Varna, 12.09.2024

Reviewer:

Заличено на основание
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