REVIEW

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Regarding: An announced call for the academic position of "Associate professor" in the sphere of higher education 7. Health care and sport; professional field 7.1 Medicine, "Internal diseases" specialty—with an applicant for the position Dr. Yavor Kostadinov Kashlov, Ph.D., for the needs of the Department of "Propedeutics of Internal Medicine". Faculty of Medicine in Medical University "Prof. Dr. P. Stoyanov"-Varna and the Clinic of "Internal Diseases" in "Sveta Marina" Multiprofile Hospital for Active Treatment JSC — Varna. The announcement was promulgated in the State Gazette, issue 43/31.05.2019.

Pursuant to **order R-109-242**/26.07.2019, issued by the Rector of Medical University – Varna and in view of the decision of the Scientific Jury, I have been appointed to prepare a statement regarding the announced call. This statement has been prepared according to the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules of its application and the Rules on terms and conditions for the acquisition of academic degrees and the occupation of academic positions in MU – Varna.

1. Brief biographical and professional development data

Dr. Yavor Kostadinov Kashlov, Ph.D., completed his secondary education in *Naiden Gerov* 7th Secondary School in the town of Varna in 2003. In 2009 he graduated as a doctor from Medical University "Prof. Dr. P. Stoyanov", Varna. Since 2017 he has been an Internal Diseases practitioner. In 2011 he was appointed *Internal Diseases* doctoral student at the "Department of Propedeutics of Internal Medicine". In the same year he was appointed Adjunct Assistant and in 2013 he was appointed Regular Assistant. He has been Chief Assistant since 2017 at the "Department of "Propedeutics of Internal Medicine", MU – Varna. In 2017 he was awarded the educational and scientific degree "Doctor" on the specialty "Internal Medicine", with the topic "Biological markers of necrosis and necroptosis in cardiovascular diseases".

2. Scientific research activity and related contributions

The total amount of scientific work, with which the applicant participates in the competition, is 32. They have been published in the period of 2014 – 2019, with personal impact factor of 26,32. The scientific issues, reviewed in Dr Kashlov's work, are related to current and fast developing fields in Medicine. The scientific research of the applicant is characterized with a breadth of scope. It is in the sphere of Internal Diseases as well as Cardiac Pathology; Oncology and Psycho-Oncology, Metabolic Risk and Medical Imaging.

The majority of his scientific work (16) Dr. Kashlov has dedicated to different issues in Cardiology. He looks for a causal link between patho-physiological phenomena like types of cell death and cardiovascular diseases. For the first time in accessible literature the potential predictive value of the necroptosis marker - RIPK3 – was reported in patients with myocardial infarction with ST segment elevation. The role of micro RNA and long non-coding RNAs was reported in the diagnostics of cardiac diseases. In part of his publications the applicant has emphasized on the identification of potential biomarkers for improving the diagnostics and the treatment of cardiovascular diseases.

A scientist of diverse scientific interests, Dr. Kashlov participates in this call with 11 publications in the sphere of Medical Oncology and Radiation treatment, 3 publications in the sphere of Psycho-Oncology and 2 publications in the sphere of the Metabolic Risk.

Part of his scientific work is dedicated to the mechanisms of tumor progression and drug resistance; adjusting the prognosis, problems of the anti-angiogenic therapy and immune therapy in patients with solid tumors.

Dr. Kashlov's **thesis** on "Biological markers of necrosis and necroptosis in cardiovascular diseases" has unequivocal scientific contributions as follows:

- For the first time in Bulgaria the levels of serum markers of necrosis and necroptosis were researched in patients with cardiovascular diseases;
- For the first time in the world in clinical practice the potential role of necroptosis was proven as a new mechanism of cell death in patients with acute myocardial infarction with ST segment elevation after a successful reperfusion;
- For the first time in the world the potential role of necroptosis was reported in ischemic reperfusion injury when testing people with myocardial infarction with ST segment elevation;
- For the first time in the world data was demonstrated about the predictive value of the necroptosis marker - RIPK3 - regarding bad ejection fraction when patients with myocardial infarction with ST sediment elevation were dehospitalised.
- For the first time in Bulgaria it was reported that patients who died after myocardial infarction, had higher serum levels of the necrosis marker - HMGB1.

Dr. Kashlov is an independent author of a **monograph** of 244 pages. It is dedicated to a current interdisciplinary problem – "Cell death in myocardial infarction and heart failure". Cardiovascular diseases are the cause of 45% of all lethal cases in Europe and 37% in the EU. This is why new guidelines are necessary in order to improve diagnostics, therapy and prognosis in cardiac patients. In recent decades scientific efforts have been concentrated on the understanding of patho-

physiological mechanisms in the development of cardiovascular diseases. The onset of cell death is at the root of patho-morphological damage to the heart tissue in myocardial infarction and heart failure. It appears that the process of seeking and understanding the molecular and biochemical pathways and mechanisms, which cause cell death, is the modern perspective of developing faster and more reliable diagnostic tests and treatment possibilities. There is a whole separate chapter in the monograph on the problem of cardio toxicity, including cardio toxicity which is caused by anticancer drugs, and the strategy towards containing it.

Dr. Kashlov has registered scientific profiles on Google Scholar and Research Gate.

From the submitted academic reference of citations in the database of Web of Science, Scopus and Google scholar 18 citations of the applicant's studies have come up in scientific editions; abstracted and indexed in world renowned databases with scientific information and 8 more citations in non-referenced magazines with scientific reviews.

3. Educational activity

From the attached reference by MU – Varna it is obvious that Dr Yavor Kashlov Ph.D., started his teaching activity in MU – Varna on 14.02.2013 and has general teaching experience of 6 years. Dr. Kashlov conducts seminars with students of the Faculty of Medicine and has average teaching workload of over 170 hours per annum, which satisfies the requirements of the Rules for development of the academic starf of MU – Varna - regarding participating in this competition.

4. Conclusion

In conducting a comprehensive assessment of the scientific production and the contributions related to it: the teaching and clinical experience of Dr. Kashlov, he meets the quality and quantity criteria for the academic position of "Associate Professor", which are outlined in the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules of its application and the Rules on terms and conditions of acquisition of academic degrees and occupation of academic positions in MU – Varna. This motivates me to express my positive statement on the choice of Dr. Yavor Kostadinov Kashlov, Ph.D., for "Associate Professor" on the "Internal diseases" specialty at the Department of Propedeutics of Internal Medicine", The Faculty of Medicine in Medical University "Prof. Dr. P. Stoyanov"- Varna and the Internal Diseases Clinic in "Sveta Marina" Multiprofile Hospital for Active Treatment JSC – Varna.

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