To the members of the Scientific Jury

Regarding the competition for occupation of the academic position of

"associate professor" in the scientific specialty "clinical laboratory"

for the needs of the MHAT "National Heart Hospital" Sofia.

## REVIEW

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Regarding: Application of Senior Assistant Dobrinka Dineva Savova, MD PhD, for the occupation of Academic position "Associate Professor" in Clinical Laboratory for the needs of MHAT-NHH EAD, Sofia, following a competition announced in the State Gazette, Issue No. 61 of 02 August 2019.

## Dr. Dobrinka Dineva Savova is the only participating candidate in the announced competition for the occupation of academic position "Associate Professor" in Clinical Laboratory for the needs of Clinical laboratory at the MHAT-NHH EAD, Sofia

The documents submitted by Dr. Dineva contain the necessary information for assessment and are in compliance with the requirements for participation in a competition under the Development of Academic Staff in the Republic of Bulgaria Act, as well as all documents in accordance with the Rules on the Terms and Conditions for Acquisition of Academic Degrees and Occupation of Academic Positions at the "National Heart Hospital" Sofia.

## Applicant's Qualities and their Compliance with the Uniform Requirements and the Regulations at MHAT NHH EAD Sofia

**Brief biographical data** of Dr. Dobrinka Dineva Savova shows a fully-fledged path of a doctor and a scientist who meets the requirements for occupying an academic position of associate professor. Dr. Dineva graduated in medicine in 1990 from the Medical Academy - Sofia, acquired a specialty in a clinical laboratory in 1997, and in 2013 he successfully defended his PhD degree. Her entire work experience goes to the NHH, consistently occupying the posts of academic scientific researcher degree III, II

and I, and since 2010 - Senior Assistant at the Clinical Laboratory of the hospital, which she currently heads. Dr. Dineva's professional career combines dedication and comprehation to patients and the pursuit of improvement, the acquisition of new knowledge and qualifications. **She is knowledgeable in laboratory diagnostics of hemostasis, thrombosis and platelet function research, with a view to a deeper understanding of their biology, pathology and management of antiplatelet therapy in clinical practice.** 

**Teaching.** Dr. Dineva has a lengthy but relatively modest teaching career. Its annual academic load ranges from 126 to 252 hours, which are mainly extracurricular activities - training of postgraduate students in the PGQ program. She participates as well in the training of medical students with a seminar on "Laboratory tests for cardiovascular disease" as part of a course in cardiology. She also participates in international courses in hemostasis and clinical chemistry. The stated scope teaching activity covers the requirements for occupying the academic position of "Associate professor".

Dr. Dineva's **research activity** meets the requirements for occupying the academic position of "associate professor". It **covers 1 monograph, 15 articles in periodicals and 3 chapters of collective monographs. A total of 15 are actual publications in refereed (peer-reviewed) scientific journals, of which 5 are in indexed journals without impact factor. The monograph, 5 of the articles and 2 of the chapters were published after the thesis was defended. This volume does not include (and is not subject to review) 22 presentations with reports, 25 scientific abstracts in Bulgaria and 15 scientific abstracts abroad, some printed in prestigious magazines. The information in the Central Medical Library of Sofia shows a total of 27 citations, of which 2 in Scopus and 25 in Bulgarian sources. One article in the indexed source, 3 abstracts (non-reviewable) and 1 citation are found in Web of Science.** 

Dr. Dineva's **scientific contributions** are indisputable and meet the requirements for the position of "Associate professor". In general, I agree with the approach in preparing the self-assessment of contributions, but in terms of their value and significance, I consider the following type of categorization more appropriate. **The first area is in the field of drug therapy management in accordance with the principles of personalized medicine.** Here, Dr. Dineva's contributions are concentrated in the domain of platelet function research and antiplatelet therapy. They are pioneering the country and lead to the implementation of the most up-to-date approaches to rational treatment in the clinical practice in this particularly problematic and critical therapeutic area. The results are as follows: 1. For the first time in our country, the Multiplate impedance aggregation method has been verified according to the international requirements and the analytical reliability is monitored with 10 years practical experience (B1). 2. Individualization of antiplatelet therapy was performed based on ADP test and ASPI test values in "resistant" patients with high residual platelet aggregation ( $\Gamma$ 17,  $\Gamma$ 18). 3. Distinctive cut-off values of ADP and ASPI tests have been developed for optimal therapeutic response and increased risk of bleeding ( $\Gamma$ 4,  $\Gamma$ 18) .4. An algorithm including ROTEM thromblastastography and MULTIPLATE aggregation was used to differentiate excess bleeding caused by platelet dysfunction ( $\Gamma$ 3). As you can see, the introduction of these technologies is not only related to analytical and laboratory validation. Significant clinical studies have been published to determine diagnostic sensitivity and specificity, as well as relevant discriminant values for making diagnostic and therapeutic decisions.

The second strand of Dr. Dineva's scientific contributions is in the field of **coagulation.** 1. Laboratory monitoring for treatment with heparin and low molecular weight heparins with various anti-Xa tests ( $\Gamma 2$ ,  $\Gamma 17$ ). 2. Study of changes in laboratory hemostasis and hematological tests in the postoperative period ( $\Gamma 6$ ). 3. Determination of INR in capillary blood for monitoring oral anticoagulant therapy with point of care self-monitoring devices ( $\Gamma 9$ ). 4. Monitoring of patients with heparin-induced thrombocytopenia ( $\Gamma 5$ ).

To these two main directions should be added common laboratory-methodological developments, as well as considerable medical-diagnostic and organizational activity. Therefore, the scientific achievements of Dr. Dineva harmonize with her qualities as a competent doctor, as a teacher, and this complex undoubtedly determines the correspondence with the academic position of "Associate professor".

Unfortunately, the applicant's serious scientific contributions do not find adequate representation in the journals with impact factor, as I recommended during the procedure for awarding the PhD degree. This critical note should be taken into account in Dr. Dineva's next academic development!

## Conclusion

My recomendation to the Honorable Members of the Scientific Jury is to choose the Senior Assistant Dobrinka Dineva Savova, MD, PhD for the academic position "Associate Professor" in Clinical Laboratory for the needs of "National Heart Hospital" Sofia.

24/11/2019SofiaProfessor Dr. Dobrin A. Svinarov, MD, Ph.D., Dr. Med. Sc.