



# Standpoint

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**Subject: Competition for the academic position "Associate Professor" in the field of higher education 7 "Health and sports", professional field 7.1. "Medicine" in the specialty "Cardiology", for the needs of the Clinic of Cardiology of MHAT "National Heart Hospital", announced in state newspaper N 45 / 28.05.2021. Order of the Director of MHAT 'National Heart Hospital' for appointment of a scientific jury № 308 / 22.07.2021.**

The review has been prepared in accordance with the Law for Development of Academic Staff of Republic of Bulgaria, the Regulations for the Implementation of the Academic Staff and the Regulations on the Terms and Conditions for Acquisition of Scientific Degrees and Occupation of Academic Positions in MHAT "National Heart Hospital" and requirements for holding the academic position "Associate Professor". The procedure for announcing the competition is in accordance with the requirements of the Law on Scientific Degrees and Scientific Titles, no procedural violations have been established. Dr. Iliyana Petrova, PhD is the only candidate in the competition.

Dr. Iliana Petrova was born in 1980. She received her secondary education at the College of Economics in 1998. In 2005 she graduated in medicine at the Medical University, Sofia. Since 2006 she has been an assistant physician at the National Heart Hospital, Sofia. Total work experience as of July 19, 2021 - 15 years, 3 months.

Dr. Iliyana Petrova has specialties in cardiology since 2012 and invasive cardiology since 2013. She defended a dissertation on topic of "Study of renal function in patients undergoing invasive angiographic examination with a new biomarker - Neutrophil Gelatinase Associated Lipocaline (NGAL)" and in 2020 she received the educational and scientific degree " Philosophy Doctor ".

She speaks English and French.

**Evaluation of the research activity:**

This activity is reflected in publications and various forms of scientific activity. The scientometric data are presented in Table 1. The available points at Dr. Petrova exceed the minimum requirements for "Associate Professor".

**Table. 1. Scientometric data Dr. Petrova.**

<b>Group of indicators</b>	<b>Indicator</b>	<b>Minimum sum of points</b>	<b>Completed number of points</b>
<b>A</b>	1. Dissertation for the award of educational and scientific degree "Doctor"	50	50
<b>C</b>	3. Habilitation work - monograph	100	100
<b>D</b>	7. Publications and reports published in scientific journals, referenced and indexed in world-famous databases of scientific information	60/n	135,85
	8. Publications and reports published in non-peer-reviewed journals with scientific review or published in edited collective volumes	30/n	143,50
	9. Published chapter of a collective monograph	20/n Total 200	110,00
<b>E</b>	10. Citations or reviews in scientific journals, referenced and indexed in world-famous databases of scientific information or in monographs and collective volumes.	15 /n	30
	12. Citation or review in non-peer-reviewed journals with scientific review	5 /n Total 50	45
<b>Total for all groups</b>		<b>400</b>	<b>614,35</b>

Dr. Petrova participates in the competition for "Associate Professor" in Cardiology with 60 scientific papers:

- 17 scientific publications in Bulgarian journals (11) and books (6);
- 1 monograph;
- 42 abstracts from participation in scientific forums (25 of them in international forums);

A list of established 2 citations in referenced foreign journals and 9 citations in non-referenced Bulgarian sources is presented.

Dr. Petrova's publications can be divided into several areas, and their qualitative characteristics are of a very high scientific and scientific-applied level:

- I. CONTRAST-INDUCED NEPHROPATHY (monograph, publications and abstracts № 6-9,16,17,26,27,41,47,50,54,55,59)

The mentioned scientific works present the conditions for the occurrence of contrast-induced nephropathy after an angiographic examination and indicate the clinical significance of the problem. The main mechanisms associated with changes in renal hemodynamics, vascular vasoconstriction, direct cellular cytotoxicity, physicochemical characteristics of contrast agents (especially viscosity and osmolarity) and oxidative stress, which lead to impaired renal function after the application of contrast media, are discussed in details. Based on the pathophysiological mechanisms, the main directions related to the preventive measures for reduction of the cases with contrast-induced nephropathy are noted.

- II. INVASIVE CARDIOLOGY (publications and abstracts №5,18,19,22-25,28-30,32-34,42-46,48,49,51-53,55-58)

These studies investigate the application of intracoronary ECG during percutaneous coronary interventions, percutaneous interventions of bifurcation stenoses with specific bifurcation stent BIOSS, interventional treatment of acute pulmonary thromboembolism by catheter fragmentation and the results of multivessel coronary artery disease.

III. ACUTE CORONARY SYNDROMES – RISK FACTORS, PROGNOSIS AND INTERVENTIONAL TREATMENT (publications and abstracts №28-30,32-34,48,49,51-53,56-58)

The presented papers describe the NHH's own experience in the treatment of patients with STEMI, analyzing in detail the risk profile, clinical presentation and the therapeutic approach taken. The comparison of the data from different years proves that with the entry of the interventional treatment the occurred in-hospital complications and the need for mechanical ventilation are reduced.

IV. ARTERIAL HYPERTENSION AND OTHER CARDIOVASCULAR RISK FACTORS (publications and abstracts № 3,12-15,20,21,35-40)

These scientific papers are focused on the home measurement of BP, stress in arterial hypertension and data from BULPRAKT-HEARTstudy and EUROASPIRE III.

V. HEART FAILURE (publications and abstracts №12,13,20,37)

The papers in this section present own data from a scientific study aimed at the study of proteomic analysis in patients with cardiovascular disease and the search for new potential biomarkers.

VI. OTHER CARDIOLOGICAL TOPICS AND CLINICAL CASES (publications and abstracts №1,2,4,10,11,31)

**Another scientific activity**

Dr. Petrova participates as a reviewer in the journal Renal Failure (<https://www.tandfonline.com/loi/irnf20>) ISSN: 1525-6049 and is a member of: the Bulgarian Society of Cardiology and the Bulgarian Society of Interventional Cardiology. She has participated as a lecturer in many international symposia.

**Evaluation of teaching activities**

From the provided reference, the teaching load amounts to a total of 250 hours / year.

## **Evaluation of the diagnostic and treatment activity**

The candidate has 2 specialties - cardiology and interventional cardiology. Maintains excellent continuing medical education in the form of courses and participation in medical forums at home and abroad as a result of which she has excellent abilities in the diagnosis and treatment of cardiovascular disease.

## **Conclusion:**

The candidate covers the quantitative requirements for research, teaching and diagnostic activities for the educational and scientific position of "Associate Professor". I have no remarks on the participation of the candidate in the competition.

## **Summary:**

Based on the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions in MHAT "NHH" EAD, Terms and conditions for acquiring the academic position "Associate Professor", Dr. Petrova, MD, is responsible the requirements for holding this position.

Based on an analysis of the scientific works and her teaching qualities, I propose that Dr. Petrova, MD, be elected "Associate Professor" for the needs of the Clinic of Cardiology of MHAT "NHH".

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Sofia

  
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