

To The Chairman of Scientific Jury
designated by Order No. R-109-239 / July 26, 2019
by the Rector of the Medical University-Varna

Statement

by Prof. Kiril Hristov Hristozov MD, Ph.D
Educational Sector Endocrinology, Second Department of Internal Medicine,
Faculty of Medicine, Medical University "Prof. Dr. Paraskev Stoyanov",

Member of the Scientific Jury for the competition for the occupation of the academic position Associate Professor in the field of higher education Health and Sports, in the professional field Medicine and scientific specialty "Cardiology" for the needs of the Department of Propaedeutics of Internal Medicine, Faculty of Medicine at the Medical University of Varna and for the Clinic of Internal Medicine at the University Hospital "St. Marina" - Varna

Brief information about the competition

The competition was announced in the State Gazette no. 43 / 31.05.2019.

By order No. R-109-239/26.07.2019 of the Rector of the Medical University-Varna I was appointed to prepare an opinion. The procedure for announcing the competition is in accordance with the requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria / 05.05.2018 and with the Rules for the Development of the Academic Staff in the Medical University-Varna / 29.10.2018.
Dr. Maria Stoyanova Dimova-Mileva is the only candidate.

Short details of the applicant

Dr. Maria Stoyanova Dimova-Mileva completed her secondary education in 1995 at the Language High School, Silistra, with main language English and second language French. She graduated in medicine in 2001 at the Medical University – Varna. Part of her pre-graduate internship she spent at the University Hospital in Besançon, France. She started working as a resident intern at the hospital of Silistra in 2001, next she worked as a medical representative at a French pharmaceutical company, at the Cardiology Clinic of the Hospital "St. Marina, Varna, in outpatient endocrinology practice and since 2008 as a physician at the Clinic for Internal Medicine at the University Hospital "St. Marina." Dr. Dimova is fluent in English, French and Russian.

Specialties acquired

Dr. Maria Dimova-Mileva has acquired specialties in Internal Medicine - 2014 and Cardiology – 2018.

Postgraduate qualifications

1. Abdominal Echoscopy - 2014
2. Certificate of Transthoracic Echocardiography in Adults of the European Association of Cardiovascular Imaging - 2016.(ESC/EACVI) – 2016 r.
3. Expert activities in Echocardiography - 2018
4. Ultrasound diagnostics of vessels – 2019r.

Research activity

Dr. Maria Dimova-Mileva received her PhD degree in 2017 after successfully defending her dissertation on the topic: “Prospective Follow-up Of Patients With Beta-Thalassemia Major For Cardio-vascular Status And Cardio-vascular Pathology”

In this competition, the applicant presented the following scientific data

1. Monograph in Bulgarian with the title "*Anemia and cardiovascular changes*", 2019, edition of Medical University-Varna, ISBN 978-619-221-202-5.
2. Full-text articles in scientific publications, referenced or indexed by WOS or Scopus databases - 3
3. Abstracts of reports in scientific publications, referenced or indexed by world-famous WOS or Scopus databases - 5
 4. Full-text publications in non-refereed peer-review journals and editing of collective volumes – 22.
 5. Abstracts of reports non-refereed peer-review journals and editing of collective volumes -11.
 6. Chapter in a collective monograph – 1.
7. Number of citations: 10 in Bulgarian literature in non-refereed journals with scientific review

Dr. Dimova is the individual author in 1 publication, first author in 16, second author in 10 and third and subsequent in 16 scientific papers.

Dr. Dimova has participated in several European cardiology congresses, in national cardiology congresses; in national and international student forums as academic mentor of students' presented scientific work.

The presented scientific output is sufficient in volume, and complies with the requirements of the Academic Staff Development Act in the Republic of Bulgaria and the Rules for the Academic Staff Development in the Medical University of Varna for the occupation of the academic position Associate Professor.

Research activity

The main scientific fields in which Dr. Dimova worked were: cardiovascular changes in anemic syndromes - congenital and acquired; cardiovascular involvement in diseases of the thyroid gland, chronic kidney disease; heart failure and diabetes mellitus, congenital heart disease and cardio oncology.

Dr. Dimova's PhD is dedicated to a rare disease - a thalassemia major and cardiovascular damage, which occur in these patients and which are determinative the life expectancy and quality of life of the patients.

A natural sequel of this work is the monograph, which examines the relationship between anemic syndrome on cardiovascular function. A special chapter is dedicated to patients with heart failure and iron deficiency anemia. The pathophysiological mechanisms of anemia development in patients with heart failure and the impact of anemia on prognosis are presented in detail. Also, the latest diagnostic indicators for precision diagnosis are given in detail and therapeutic options are discussed.

In the monograph iron deficiency, without anemia in patients with heart failure with reduced ejection fraction, as a cause of poor treatment response is also discussed. This is a topical problem in cardiology, and is featured in the latest guidelines for the treatment of heart failure by the European Cardiology Society and the American Heart Association.

The effect of anemia in patients with ischemic heart disease in acute and chronic forms, hypertension and rhythmic and conduction disorders is examined separately.

Also important is the development of cardiac changes as the sole cause of iron-deficiency anemia, noting that these changes are completely reversible.

The changes occurring in the cardiovascular system in patients with sickle cell anemia are presented for the first time in detail in the Bulgarian scientific literature.

Much of the scientific publications, some of which have also been presented at international scientific forums, are dedicated to patients with thalassemia major and cardiovascular disorders. A comparison was made between Bulgarian patients with thalassemia and healthy controls in terms of hemodynamic parameters, anthropometric parameters and echocardiographic measurements, with a significant difference in the values of these indicators. The rhythmic abnormalities in patients with thalassemia, the causes and mechanisms for the development of heart failure in this particular group of patients are discussed, with guidelines for diagnosis and treatment presented.

Another part of Dr. Dimova's scientific interest is focused on cardiovascular changes in patients with thyroid disease and diabetes mellitus. In one article, the fine mechanism of cardiac involvement in hyperthyroidism is discussed in detail, in another, the development of pulmonary hypertension in hypo- and hyperfunction of the thyroid gland. A small experience of the team in which Dr. Dimova works is presented with the new class of medicines for the treatment of patients with diabetes mellitus and heart failure-SGLT2-inhibitors. The renal impairment in diabetes mellitus is presented from a different perspective - the possibilities for early diagnosis by Doppler examination.

There are articles presenting late diagnosed congenital heart malformations and the options for treating and monitoring patients at this stage. Part of Dr. Dimova's scientific and research interest is devoted to cardio-oncology - mechanisms of cardiotoxicity, early diagnosis and response.

Educational and teaching activities:

Dr. Maria Dimova was selected as a full-time assistant Professor at the Department of Propaedeutics of Internal Medicine of the Medical University of Varna, in 2012, and since June 2018 she has been a senior Assistant Professor at the same department.

The workload for the last 5 years with English-language medical students is as follows:

2014/2015 - 180 academic hours
2015/2016 г. – 174 academic hours
2016/2017 г. – 180 academic hours
2017/2018 г. – 156 academic hours
2018/2019 г. - 168 academic hours

According to this indicator, she fulfills and exceeds the required minimum according to the Law and the Regulations for Academic Development of MU-Vatra. She also serves as administrative officer for the 5th and 6th year English speaking students.

Dr. Maria Dimova-Mileva is a member of the following national and international scientific organizations:

1. Bulgarian Society of Cardiology
2. European Society of Cardiology
3. Bulgarian Heart and Vessel Association

In conclusion, Dr. Maria Dimova is established internist, cardiologist and teacher. She has extensive knowledge, especially in ultrasound diagnostics and broad scientific interests. Her scientific and teaching activities are sufficient enough and cover than the minimum state requirements and shows a variety of interests. She complies with the requirements of the Academic Staff Development Act in the Republic of Bulgaria and the Rules for the Academic Staff Development at the Medical University of Varna, which gives me reason to recommend to the honorable members of the scientific jury to vote positively for the academic position of Associate Professor to Dr. Maria Stoyanova Dimova-Mileva, MD.

9.09.2019



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(Prof. Kiril Hristozov, MD, PhD)

