

OPINION

by

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Member of the Scientific Jury, designated by Order No. R-109-239 / July 26, 2019 by Prof. Dr. Krasimir Ivanov, MD, PhD - Rector of Medical University Prof. Dr. Paraskev Stoyanov, Varna.

Subject: 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 Diseases, 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

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 competition was announced in the State Gazette no. 43 / 31.05.2019. Dr. Maria Stoyanova Dimova-Mileva is the only candidate. 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.

Short details of the applicant

Dr. Maria Stoyanova Dimova completed her secondary education in 1995 at the Language High School, Silistra, and higher education in medicine in 2001 at the Medical University, Varna. She started working as an intern at the Silistra Hospital in 2001, and then subsequently worked as a medical representative in pharmaceutical company, at the Cardiology Clinic of the St. Marina, Varna, specialized individual practice in Endocrinology, and since 2008 as a resident at the Clinic for Internal Diseases of the University Hospital “St. Marina” in Varna. Dr. Dimova is fluent in English, French and Russian.

Specialties acquired and postgraduate qualifications

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

Specializations:

Expert activities in Echocardiography - 2018

Expert activities in Abdominal Echoscopia - 2014

Certificate of Transthoracic Echocardiography in Adults of the European Association of Cardiovascular Imaging - 2016.

Expert activities in ultrasound diagnostics of vessels - 2013

Projects:

She has also participated in several clinical trials in cardiology.

Professional Experience

Dr. Maria Dimova has been interested since her first working day in the internal medicine and cardiology in particular, and she has now 18 years dedicated to treating patients with heart diseases and with other diseases of the internal organs. In terms of professional qualification, she fulfills the requirements for habilitation.

Research activity

Dr. Maria Dimova received her PhD degree in 2017 after successfully defending her dissertation on the topic: "Prospective monitoring of cardiovascular status and cardiovascular pathology in patients with thalassemia major".

In this competition, the applicant presented the following scientific data (48 publications in total):

- a monography with a total volume of 226 pages on the topic: "Anemia and cardiovascular changes" – 2019, 100 points.

- Publications:

A. To fulfil the minimal state requirements by the Law from 2018 and the Rules of MU-Varna / 2018: 200 points.

o In scientific publications, abstracted or indexed by world famous databases WOS or Scopus: in full text - 3, abstracts - 5.

o In non-refereed scientific peer-reviewed journals or in published collective volumes: in full text: in journals - 19.

o Chapter in a collective monograph - 1.

B. Articles in non-refereed journals with scientific review beyond the required minimum state requirements - 3.

- Participation in international, national and regional scientific events - 6; participation in student forums as a leader of young researchers - 10.

Number of citations: 10 in Bulgarian literature in non-refereed scientific peer-reviewed journals, 50 points in total.

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

Thus, the publication activity on this indicator exceeds the minimum state requirements of the Law and of the Regulations of the Medical University of Varna for acquiring the academic position of Associate Professor.

Scientific achievements and contributions

Dr. Maria Dimova's main scientific interests are in the field of cardiovascular involvement in patients with various types of Thalassemia. She is one of the pioneers in this field of science in Bulgaria and one of the few researchers on this topic worldwide. For the first time in Bulgaria, a prospective observation of 38 Thalassemia major patientss was conducted in the Center for Rare Diseases of the University Hospital St. Marina. The cardiovascular changes of these patients were examined and compared with those of healthy controls. Early changes in hemodynamics and cardiac function have been identified that correlate with NTproBNP levels. Correlation with CMR indicators was also sought. The presence of rhythm disorders in these patients, the treatment of heart failure in patients with TM and failure in renal function were also examined. Some of the studies are on patients with Thalassemia intermedia who are not transfusion-dependent and are less well known and studied than those with TM. A practical algorithm for diagnosis of this subtype of the disease is given.

It is natural that Dr. Dimova's interest is expanding from genetically transmitted anemia to the cardiovascular changes in all in anemia syndromes which she did in her monographic work. The adverse pathophysiological cardiac and vascular changes in chronic anemia are emphasized and the importance of iron deficiency supplementation as a new target for treatment in patients with CH is shown.

The main focus of her research is the problems of heart failure - diagnosis, role of biomarkers and treatment of patients with this serious disease, especially in concomitant comorbidities, such as diabetes. Patients with congenital cardiac malformations in adults, such as coarctation of the aorta, atrial septal defect and their current treatment and monitoring are also of scientific interest.

As an internist with diverse interests, Dr. Dimova has investigated the cardiovascular changes in patients with thyroid gland diseases, diabetes mellitus, and oncological diseases. Various aspects of diagnosis and behavior in patients with renal impairment have been considered.

Dr. Dimova has other original contributions. She participated in a team that for the first time in our country reviewed the problems of ferroptosis, a new type of cell death resulting

from the accumulation in the cells of iron-dependent lipid peroxidase and the accumulated free oxygen radicals lead to the destruction of cellular structures, including nucleic acids. For the first time in Bulgaria the attitudes of students from Northeastern Bulgaria to folk dances are examined. Regularly practicing folk dancing during sports classes, in addition to health benefits, also influences other aspects of students' life, such as knowledge about folk traditions and cultural memory and creating new acquaintances and friends.

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.

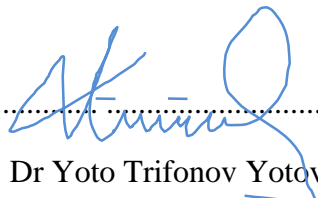
A record of teaching workload over the last 5 years indicates a mean of 171.6 hours of practical training with English-language medical students.

According to this indicator, she fulfills and exceeds the required minimum according to the Law and the Regulations for Academic Development of MU-Vatra. Dr. Dimova was selected by graduating international medical students as their most favorite teacher in 2018. She also serves as administrative officer for the 5th year English speaking students.

Conclusion:

Dr. Maria Stoyanova Dimova is an established professional in the field of internal diseases and cardiology, with extensive knowledge and skills especially in the field of echocardiography, with excellent professional training and proven skills. She has accumulated teaching experience and is loved and respected by her students and colleagues. Her scientific output is sufficient in volume, covers more than the minimum state requirements and shows a variety of interests, publications are in different journals. It 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. This gives me reason to recommend to the honorable members of the scientific jury to vote positively for of the academic position of Associate Professor to Dr. Maria Stoyanova Dimova-Mileva, MD.

20.08.2019


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/Prof. Dr Yoto Trifonov Yotov, PhD/