

# APPRAISAL

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Re: Competition for the academic position “associate professor” in the field of 7. Healthcare and Sports 7.1 Medicine and medical specialty 03.01.47 Cardiology for the needs of Section of Education, First Department of Internal Diseases at the Faculty of Medicine – 0.5 regular position, and for the needs of Second Clinic of Cardiology (non-invasive) – 0.5 regular position, at the University Saint Marina Government Hospital

## General data concerning the competition

The competition for the academic position “associate professor” is announced in the Official gazette of the Republic of Bulgaria, No.17 / 26 Feb 2021 on the basis of decision of a Department meeting No. 102-3011 / 16 Dec 2020

I have been specified as an outward member of the Scientific Jury for the academic position “associate professor” by a written order of the Proctor of Varna Medical University (No. R-109-175 / 23 Apr 2021), and the decision to prepare an appraisal was taken at a meeting of the Scientific Jury (Record No.1 / 7 May 2021)

Two candidates: Antoniya Rumenova Kisheva, MD, PhD and Lilyana Georgieva Mircheva, MD, PhD have documents for the competition.

I have received all the documents which are necessary for preparing the present appraisal from the Department of Career Development at Varna Medical University “Prof. Paraskev Stoyanov” (outgoing No. 109-382 / 28 May 2021).

The appraisal, which is grounded below, is compliant with the Law of advancement of the academic staff in Republic of Bulgaria, the Regulations for its application, and the Regulations for advancement of the academic staff in Varna Medical University “Prof. Paraskev Stoyanov”.

## **Appraisal of Antoniya Rumenova Kisheva, MD, PhD**

### **Professional experience**

She graduated medicine at Varna Medical University in 1999 (Diploma No.6986), and gained specialties in General Medicine (2007) and Cardiology (Certificate No. 017551 / 20 March 2014). Dr. Kisheva is in a possession of Certificate of Echocardiography: expert level (No. 0377 / 20 April 2017).

Professional advancement:

- 2001 – 2007 general practitioner in Varna
- 2008 – 2014 general practitioner at Varna Saint Marina University Hospital
- 2014 cardiologist at Varna Saint Marina University Hospital
- 2014 – 2018 assistant professor at Varna Saint Marina University Hospital
- 2018 – 2021 chief assistant professor at Varna Saint Marina University Hospital

Dr. Kisheva is a member of the Bulgarian Society of Cardiology, European Society of Cardiology and its associated Council of Stroke, Council for Cardiology Practice, Association of Cardiovascular Imaging. She is also a member of the European Society of Hypertension, Heart-Lung Association, and Society of the Cardiac Sonographers “Varna Echo”. Dr. Kisheva is a member of the Managing Committee of Heart-Lung Association, and Editorial Secretary of Heart-Lung Journal.

### **Scientific research activity**

Dr. Kisheva has submitted publications (articles and abstracts) for participation in the competition as follows:

- Total number of published articles – 17, whereas:
  - 3 in peer reviewed and indexed journals (number of points = 58.57)
  - 6 in non-indexed journals (number of points = 107.5)
  - 4 have been applied for a PhD thesis
  - 3 have been applied for filling an academic position “assistant professor”
  - 1 in non-indexed journal, and out of the minimal National requirements (number of points = 6)
- Total number of published abstracts – 32, whereas:
  - 4 in peer-reviewed and indexed journals (number of points = 62)
  - 3 in non-indexed journals (number of points = 36)
  - 13 are connected to participation in international conferences and are not included in the minimal National requirements
  - 12 are connected to participation in Bulgarian conferences and are not included in the minimal National requirements

Other quantitative indices for the scientific research activity of Dr. Kisheva include:

- PhD thesis – 1
- Authored monograph – 1 on the following topic: “Stroke in the view of the cardiologist” (Varna Medical University, 2020, ISBN 978-619-221-273-5)
- Edited monograph – 0

Dr. Antoniya Rumenova Kisheva defended a PhD thesis in 2017 and obtained educational and scientific PhD degree on the following topic: “Role of fibrosis and mineralcorticoid receptor block in atrial fibrillation” (Diploma No. 263 / 20 Dec 2017).

Dr. Kisheva participates in the real 49 publications in periodicals as follows:

- First author – 38 publications (77.5%)
- Second author – 8 publications (16.3%)
- Third author – 1 publication (4.8%)
- Dr. Kisheva has a critical personal participation in 39 of 49 publications (79.6%) – FLAE (“first-last-author-emphasis”): first author in 12 articles and 26 abstracts, and last author in 1 article.
- Single author in 6 published articles and abstracts (12.2%).

The results of the scientific research activity of the candidate are reported at prestigious meetings in Bulgaria and abroad (40 participations). She has an honorary diploma for best poster at the XV National Congress of Cardiology (Sofia, 2016) and for a presentation of a clinical case at the Conference “Days of Echocardiography” (Sofia, 2018). Dr. Kisheva has an eminent participation at one of the most esteemed arrhythmia conferences in the world: Venice arrhythmias (2019) on the following theme – WHAT TELLS US GALECTIN-3 IN ATRIAL FIBRILLATION? (A. Kisheva, Y. Yotov, T. Chervenkov).

Dr. Kisheva has participated in 1 scientific research project: “Randomized clinical study for assessment of the efficacy and safety of an additional therapy with aldosterone antagonist for the reduction of atrial fibrillation paroxysms, with restored sinus rhythm” (Medical Science Fund, Varna Medical University, 2012 – 2016).

### **Impact factor and Citations**

The IF is 9.678 according to an academic reference which is signed by the Director of Library at Varna Medical University ““Prof. Paraskev Stoyanov” (outgoing No. 120 / 12 Apr 2021). However, a published article in Anatolian Journal of Cardiology with IF=1.223 is not included this reference. Thus, the total IF of the journals in which Dr. Kisheva has publications is equal to 10.901.

The publications of Dr. Kisheva are cited in 8 articles (total number of points= 65) according to the academic reference (outgoing No. 120 / 12 Apr 2021). All the citations are in Bulgarian periodicals. An examination of the scientific profile of Dr. Antoniya Kisheva in Google Scholar (<https://scholar.google.bg/citations?user=BMdKFBkAAAAJ&hl=bg>) proves the presence of two more publications with IF in which she is a co-author:

- Boriani, G., Proietti, M., Laroche, C., Fauchier, L., Marin, F., Nabauer, M., ... & EORP-AF Long-Term General Registry Investigators Boriani G Chair Lip GYH Tavazzi L Maggioni AP Dan GA Potpara T Nabauer M Marin F Kalarus Z Fauchier L. (2018). Contemporary stroke prevention strategies in 11 096 European patients with atrial fibrillation: a report from the EURObservational Research Programme on Atrial Fibrillation (EORP-AF) Long-Term General Registry. *EP Europace*, 20(5), 747-757.
- Boriani, G., Proietti, M., Laroche, C., Fauchier, L., Marin, F., Nabauer, M., ... & Lip, G. Y. (2019). Association between antithrombotic treatment and outcomes at 1-year follow-up in patients with atrial fibrillation: the EORP-AF General Long-Term Registry. *EP Europace*, 21(7), 1013-1022.

These articles are cited in 102 international scientific journals.

The examination of Google Scholar shows that Dr. Kisheva has an H-index= 2.

**The submitted scientific publications and citations are sufficient in terms of amount and quality for participation in the competition, and they fulfill the minimal National requirements.**

The main scientific and research contributions of Dr. Kisheva (30 of 49 real publications) are in the domain of atrial fibrillation. The first comprehensive study has been completed about galectin-3 levels in a group of patients with atrial fibrillation. The relation between left ventricular mass, cardiac fibrosis and atrial fibrillation recurrences has been studied by analyzing galectin-3. Treatment with spironolactone has been prospectively examined in patients with atrial fibrillation and a protective effect has been found regarding hospitalizations whereas a lack of effect has been determined on galectin-3 (the biomarker for fibrosis) and the arrhythmia relapses. Patients with gout have been proved to have statistically significant risk increase for atrial fibrillation recurrences, and significant difference of galectin-3 levels has been found in patients with gout compared to those without the disease. The relation has been evaluated between atrial fibrillation, coronary artery calcium score, and galectin-3. Arterial hypertension, female sex and CHA<sub>2</sub>DS<sub>2</sub>-VASc score have been confirmed as significant risk factors for relapses of atrial fibrillation.

The research activity of Dr. Kisheva constitutes a valuable contribution for the Bulgarian and international scientific community with respect to usage of galectin-3 biomarker in clinical practice.

### Educative and teaching activity

The references for the educative work-load and activity of Dr. Kisheva are signed respectively by prof. Albena Kerekovska (Director, Educational activities) and Ludmila Boyarova (Head, Human resources) at Varna Medical University ““Prof. Paraskev Stoyanov”.

Dr. Kisheva has a teaching practice with a duration of 7 years and 13 days as of 24 Mar 2021, and educational work-load for a period of 5 years (2016-2020) as follows:

- 2016 – 180 hours
- 2017 – 146 hours
- 2018 – 212 hours
- 2019 – 210 hours
- 2020 – 189 hours

**The educative and teaching activity of Dr. Antoniya Kisheva is completely sufficient for participation in this competition for conferring on her the academic position “associate professor” of cardiology.**

### Diagnostic and therapeutic activities

**Dr. Antoniya Kisheva is a Bulgarian cardiologist with excellent scientific and practical training, profound learning experience and international recognition.** She implemented prospective studies for the first time in Bulgaria about the clinical significance of galectin-3 in atrial fibrillation, and the role of Spironolactone in the arrhythmia treatment. She examined risk factors for atrial fibrillation recurrences: gout, coronary artery calcium score, arterial hypertension, female gender, and CHA<sub>2</sub>DS<sub>2</sub>-VASc score.

### Conclusion

**I consider that Dr. Antoniya Rumenoa Kisheva fulfills the general and specific requirements for acquiring the academic position “ASSOCIATE PROFESSOR”. I am fully confident and suggest to the honored Scientific Jury to vote AFFIRMATIVELY for the decision that Dr. Kisheva should hold the academic position “ASSOCIATE PROFESSOR” in the field of 7. Healthcare and Sports 7.1 Medicine and medical specialty 03.01.47 Cardiology**

18 June 2021

Signed by Prof. Tosho Balabanski, MD, PhD



