

OPINION

by

Prof. Dr. Yoto Trifonov Yotov, MD, Ph.D.

Educational Sector Cardiology, First Department of Internal Medicine,
Faculty of Medicine, Medical University "Prof. Dr. Paraskev Stoyanov", Varna

Member of the Scientific Jury, designated by Order No. RD – 244/December, 21 2020 by Prof. Dr. Magdalena Sabeva Mitkova, PhD - Rector of University Prof. Dr. Asen Zlatarov, Burgas.

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 "Internal diseases" for the needs of the Department of Internal Diseases, Pharmacology, Pediatrics, Social Medicine, Medicine of Disaster Situations, Computer Technologies, and Latin Language, Faculty of Medicine at the University "Prof. Dr. Asen Zlatarov", Burgas.

Brief information about the competition

By order No. RD – 244/December, 21 2020 of the Rector of the the University Prof. Dr. Asen Zlatarov, Burgas, I was appointed to prepare an opinion. The competition was announced in the State Gazette No. 90/20.10.2020. Dr. Petya Kamenova Petkova and Dr Svetlin Nedkov Tsonev are candidates for the position. 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 Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions and development of the academic staff at the University Prof. Dr. Asen Zlatarov, Burgas / 26.09.2019.

Short details of the applicants

Dr. Petya Kamenova Petkova completed her higher education in medicine in 1984 at the High Medical Institute, Medical Academy, Sofia. She started working as an intern at Second Internal Diseases Ward, District Hospital in Pirdop /Srednogorie/ in 1985, and in 1986 started her career as an Assistant Professor in The Diabetic Clinic of the Scientific Institute on Endocrinology and Gerontology of Medical Academy in Sofia, after successful competition. The entire subsequent professional experience of Dr. Kamenova is connected with the prestigious Faculty Hospital of Endocrinology and Gerontology of MU-Sofia, later SHATENG, where she successively became a Senior Assistant Prof (1990) and Chief Assistant Prof (1993) and so far. Dr. Kamenova speaks English and Russian.

Dr. Svetlin Nedkov Tsonev was born in 1981. He graduated Medicine in 2006. Since 2008, he has been a full-time doctoral student and since 2009 he has been a specialising resident in the Cardiology Clinic, Depart. of Propaedeutics of Internal Medicine "Prof. Dr. St. Kirkovich", MU-Sofia and University Hospital "Alexandrovska". From 2009 to 2015, he was appointed as an Assist Prof and Chief Assist Prof at the Department of Propaedeutics of Internal Medicine, MU-Sofia. From 2015 to 2018, he was specializing in angiology at Univ. Hospital City Clinic, Sofia, and from 2019 he works as a cardiologist, interventional cardiologist and angiologist at UMHAT "Alexandrovska". Dr. Tsonev speaks English, Russian, and German.

Specialties acquired and postgraduate qualifications

Dr. Kamenova has acquired specialties in Internal Medicine - 1990 and Endocrinology and Metabolic Diseases - 1992.

Dr Tsonev Has acquires specialties in Cardiology in 2014 and Angiology in 2019. In 2015, has acquired a MSc degree in Health Management from the Faculty of Public Health, MU-Sofia.

Specializations:

Dr Kamenova:

Postgraduate qualification course in pedagogy of higher medical education at MA-1987.

Postgraduate qualification course on the basics of dietetics of MA-Sofia - 1990.

Gold Certificate from the European Association for the Study of Diabetes (EASD) for the training of general practitioners, nurses and patients on the problems of patients with type 2 diabetes - 2007

Postgraduate training course in medical pedagogy at MU-Sofia, DPH - 2014.

She specializes in the Netherlands, Free University of Amsterdam.

Dr. Tsonev:

Certificate of Expert Level Echocardiography

Certificate for Ultrasound Vascular Diagnostics

Certificate of Interventional Vascular Medicine

He has specialized in the Netherlands, Slovakia, Romania, Italy, Germany, Spain.

Projects:

Dr. Kamenova:

Leader of 2 and participant in 2 international projects with the Netherlands. She has participated as a co-researcher in several multicenter clinical trials.

Dr. Tsonev:

Member of the team of 3 international projects, leader in 2 national and participant in other 2 national projects (1 under the BNSF of the Ministry of Education and Science).

Professional Experience

Dr. Kamenova has long been devoted to Internal Medicine and in particular to Endocrinology.

Dr. Tsonev for relatively short time has gained significant professional experience in various subspecialties of Internal Diseases, related to the treatment of cardiovascular diseases.

In terms of professional qualification, both candidates meet the requirements for habilitation.

Research activity

Dr. Petya Kamenova Petkova received her Educational and Scientific Degree Doctor in Endocrinology in 2003 after successfully defending her dissertation on the topic: "Insulin resistance and cardio-vascular risk in patients with Diabetes Mellitus Type 2 ". 50 points

Dr Svetlin Nedkov Tsonev received his Educational and Scientific Degree Doctor in Cardiology in 2012 after successfully defending his dissertation on the topic: "Cardiac syndrome X – clinical, instrumental and laboratory characteristics ". 50 points

In this competition, the applicants presented the following scientific achievements:

Dr P. Kamenova

Overall, 93 scientific works:

Of them, 49 are publications – 1 dissertation and 4 papers are related to the acquiring of PhD degree and will not be reviewed here and 44 are not related to the previous competition for PhD degree. 1 is in print:

- Habilitation equivalent in the form of scientific publications (not less than 10) in scientific publications, referenced or indexed by world-famous databases - a total of 18 are presented, of which I accept as real 16: 11 are in publications indexed in Scopus, 1 in Scopus & WOS, 3 are in ICI & Publon (WOS Group) and 1 is in ICI & EBSCO. Overall, **650 points; total IF 8,954**. 2 of the mentioned publications are not referenced or indexed (B4.3 and B4.12) and are in peer-reviewed collective volumes with ISSN. That is why their place is in the G8 category. In addition, the article B4.12 completely repeats the title, the authors list, the studied group, methods, and the content of the article B4.11, as the latter is more extensive and contains more information. Therefore, I accept Publication B4.11, while **publication B4.12 is not a subject of review at all**, due to the above mentioned repetition and does not contribute to the development of scientific research on the topic.

- Publications:

A. To cover the minimum state requirements by the Law from 2018 and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions and development of the academic staff at the University Prof. Dr. Asen Zlatarov, Burgas:

o Published study with a total volume of 45 pages (which has an ISBN), and is not a monography according to the Law – 30 points.

o In scientific publications, abstracted or indexed by world famous databases in full text - A total of 7 are presented, of which I accept 5 (G7.21, G7.22, G7.23, G7.24 and G.26). G7.26 I accept as a publication, but without points for it, as it is difficult to calculate what is the individual contribution of Dr. Kamenova in a multinational team in a multicenter clinical study. G7.20 is in a journal that ceased to exist before the introduction of the indexing system and does not appear in any database. In addition, in this article, the authors list, the study group and some of the results repeat those in Article G7.22, including same tables. Due to this repetition and the fact that the information in G7.20 does not contribute to or enrich the research on the issue of hypoglycaemia and catecholamine secretion, already discussed in Publication G7.22, **I do not review Publication G7.20 and do not take it as evidence**. G7.25 is an interview with the author of Paper B.5 and is not essentially a scientific publication. Total recalculated **94 points, total IF 6,718**.

o In refereed scientific peer-reviewed journals or in published collective volumes: 11 (B4.3, G8.27-G8.36); **Total 311,83 points**.

o Articles in non-refereed journals - 8

- Participation in international, national and regional scientific events - 45. Overall, 7 of them are related to the acquiring of PhD degree and **38** are after this competition and are thus reviewed; in Bulgarian scientific meetings - 22, in international – 16. **Total IF 11,284**.

Total IF– 29,956

Number of citations: in the presented reference, a total of 276 citations are referred in the worldwide scientific database, but 171 of them are related to the already mentioned multicenter project G7.26 where the evaluation of the individual authors participation is difficult to be appreciated. Therefore, I accept only the other **105** citations; a total of **1575** points.

Dr. Kamenova's individual distribution of her scientific merits is presented on Table 1 in the Appendix.

Of all publications, 16/42 (38,1%) and 12/38 (31,6%) of participations are during the last 10 years (2011-2020).

Research interests and contributions

Dr. Petya Kamenova's main scientific interests are in the field of Endocrinology:

- Determination of indices of insulin resistance, resp. insulin sensitivity as substitutes for the "gold" standard hyperinsulinemic euglycemic clamp technique.
- Therapeutic management of insulin resistance beyond the established means for treatment of type 2 diabetes.
- Determination of the frequency and characteristics of cardiometabolic risk factors of the metabolic syndrome in patients with type 2 diabetes.
- Association between two established cardiovascular risk markers – intima-media thickness of the carotid artery and insulin sensitivity in patients with type 2 diabetes.
- Determination of the effect of metformin on cardiometabolic risk factors of the metabolic syndrome.

The main scientific contributions of Dr. Kamenova are:

- The important insulin sensitivity indices do not correlate well with indices such as HOMA-IR, FIRI and insulin/glucose ratio. A cut-off level of insulin resistance in patients with overweight and obesity has been determined. Moreover, there is a good negative correlation between insulin sensitivity and waist circumference, waist/hip ratio, BMI, systolic and diastolic blood pressure. The role of waist circumference as an independent indicator of insulin sensitivity in women with type 2 diabetes is emphasized.
- Algorithms have been developed to determine insulin sensitivity by waist circumference and diastolic blood pressure in diabetics for cardiovascular risk prevention.
- The role of alpha-lipoic acid treatment to improve insulin sensitivity is established.
- Cardiometabolic risk factors of the metabolic syndrome in patients with type 2 diabetes are defined for specifically for our country, as well as the applicability of the IDF definition of metabolic syndrome in Bulgaria, as well as the frequency and characteristics of the metabolic syndrome in patients with type 2 diabetes.
- Metformin has been proven to restore the physiological insulin secretion in subjects with metabolic syndrome without causing hypoglycaemia. The drug can affect body weight and waist circumference, as well as other cardiometabolic risk factors for CVD.

She is a member of several professional organizations: Bulgarian Society of Endocrinology, Bulgarian Diabetes Association, European Association for the Study of Diabetes.

Her name was included in the 2009 Jubilee edition of "Who's Who in Science and Technology" in 2008.

Educational and teaching activities:

Dr. Kamenova began her teaching career as an assistant professor in 1986 and has taught students, PhD students and endocrinologists throughout the years. In the last 10 years, the auditorial teaching workload is: 2011/12 - 411 hours, 2013/2014 - 113 hours, 2017/18 - 222 hours, 2018/19 - 202 hours, 2019 / 20 years - 190 hours.

Dr. Kamenova has developed a curriculum for training students in Endocrinology, and an examination test in Diabetology. She prepares and gives lectures for postgraduate training in Endocrinology - a total of 18. She gives lectures at forums of GPs and endocrinologists on topics in Endocrinology.

Dr Svetlin Tsonev

Total number of presented 142 Scientific papers:

Of which 71 publications, 1 is a dissertation and 7 articles are related to the PhD procedure and are not subject of this review, and 63 are after the competition for "Doctor". A total of 5/63 (or 7.9%) are in print:

- Habilitation thesis, in the form of scientific publications (not less than 10) in scientific journals, referenced or indexed by a world-famous database: in full text: here I acknowledge

12 articles (1 in press), respectively - II.2.3 (Scopus), II.2.4 (ICI), II.2.5 (Scopus, WOS), II.2.6 (ICI), IV.2.2 (Scopus), IV.2.3 (IC), IV.2.4 (Scopus), IV.2.5 (ICI), V.2.6 (WOS), V.2.10 (WOS), V.2.12 (WOS), V.2.18 (WOS). A total of **226.59 points; total / individual IF 10,759 / 0,81** for these articles.

- Publications:

- A. To cover the minimum state requirements by the Law from 2018 and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions and development of the academic staff at the University Prof. Dr. Asen Zlatarov, Burgas:
- o Published book (which has an ISBN) on the basis of his dissertation for educational and scientific degree "Doctor" I.2 - 40 points.
 - o In supplements of scientific journals, referenced or indexed by world-famous database - 20: III.1.1-III.1.20, total **269.25** points, **total/individual IF 78,661 / 15,155**
 - o In peer-reviewed journals with scientific review or published in edited collective volumes - 11 (1 in press), V.2.5, V.2.7-V.2.9, V.2.11, V.2.13-V.2.17, V.2.19; a total of **255.57** points.
 - o Chapters in collective monographs - 3 (all in press) - I.3.1-I.3.3; a total of **1.67** points.
 - o In unreferred journals without indexing - 15: VI.1-VI.15
- According to criterion G of the Regulations of Law of Academic Development in Bulgaria: a total of **566.49 points**.

Total/individual IF 84,579/14,988

- Participation in international, national and regional scientific events - 71. A total of 15 of them are related to Procedure for Educational and Scientific Degree "Doctor", and 56 are after that and are subject to review. In Bulgarian scientific forums - 42, international meetings - 14. He was invited speaker at 2 international forums in Croatia and Northern Macedonia.

Number of citations: 11 in Bulgarian editions, incl. 4 dissertations, and 27 international refereed or indexed by world-famous database articles, incl. 3 dissertations; a total of **500** points.

Dr. Tsonev's individual distribution of his scientific merits is presented on Table 1 in the Appendix.

Of all the publications, 53/71 (74.6%) and 56/71 (78%) of the participations are during the last 10 years (2011-2020).

Research interests and contributions

The main research interests of Dr. Svetlin Tsonev are in the field of cardiovascular diseases:

- Cardiac syndrome X and microvascular function and dysfunction
- Hypertension
- Risk factors for cardiovascular disease
- Arterial and venous vascular diseases
- Heart failure
- Rare cardiovascular diseases
- Imaging techniques in Cardiology

The main scientific contributions of Dr. Tsonev are:

Original scientific contributions are related to:

1. Comparative analysis of endothelial dysfunction and myocardial ischemia-specific markers comparing female patients with cardiac syndrome X and those with coronary heart disease.

2. Comparative analysis of gene expression of α ER and serum levels of 17β -estradiol in female patients with cardiac syndrome X and in those with verified coronary heart disease.

3. A method for application of the deformation EchoCG techniques in the assessment of the left atrium (strain and strain rate) has been validated.

Contributions of scientific and applied nature are related to:

1. Developed algorithm for diagnosis and treatment of patients with microvascular angina.
2. New biochemical markers have been introduced for the differentiation of patients with microvascular and epicardial coronary disease (VEGF, alpha ER, ET1).
3. A clinical diagnostic algorithm has been developed in patients with multifocal atherosclerosis which are indicated for endovascular and vascular surgery.
4. The up-to-date ultrasound techniques have been introduced to assess myocardial deformation in patients with rare diseases (Fabry, Pompe), heart failure, pregnancy, diabetes mellitus.

Dr. Tsonev serves as a reviewer and member of the editorial board in: JACC- case reports-emerging editorial consultant; Heart Failure Reviews - reviewer; Journal of Functional Morphology and Kinesiology - reviewer; Bulgarian Cardiology - reviewer and section editor; Bulgarian Journal of Cardiology - advisory board; Praemedicus since 1925 - Deputy editor; Continuous Research Online Library - editorial board member; Medical editor of Credoweb.

Consultant member of the National Agency for Evaluation and Accreditation as an expert.

Dr. Tsonev is a member of the expert panel of: Echocardiography: masses and sources of emboli. 23rd Annual Congress of the EACVI. www.escardio.org/EACVI; Heart Imagers of Tomorrow (HIT) Clinical Case Poster session 2. 23rd Annual Congress of the EACVI. www.escardio.org/EACVI; CARDIOMYOPATHY AND PERICARDIAL DISEASES. World Echocardiography Congress 2018. Member of the Organizing Committee and Secretary of the XXIV World Congress of Echocardiography and Cardiovascular Imaging, 17-20 May, 2018y.

He is a member of several professional organizations and working groups: Bulgarian Society of Cardiology, Chairman of the Working Group on Valve Diseases of the Bulgarian Society of Cardiology in 2014-present, Member of the Working Group of BSC "Women and Cardiovascular Risk"; Bulgarian Society of Angiology; Bulgarian Society of Interventional Cardiology; Union of Scientists in Bulgaria, Member of the Board of the Association of Non-Invasive Imaging in Cardiology; Scientific circle at Dep. of Propaedeutics of Internal Diseases, MU-Sofia; Heart Imager of Tomorrow at the European Society of Cardiovascular Imaging, where he is Ambassador for Bulgaria; Working group on Hypertension and Sexual dysfunction at ESC.

He was nominated and received 10 awards for scientific achievements.

The above mentioned activity according to this indicator of both candidates covers much more than the minimal requirements of the Law and of the Regulations for the conditions and procedure for acquiring scientific degrees and holding academic positions, development of the academic staff at the University "Prof. Dr. Asen Zlatarov"-Burgas for acquiring the academic position of Associate Professor.

Educational and teaching activities:

Dr. Svetlin Tsonev was elected a full-time Assistant Professor at the Department of Propaedeutics of Internal Medicine in 2012 and until 2015 teaches Medicine students III year in Bulgarian and English, with an average auditorial class workload of 240, 345, and 395 hours. From 2015 to 2019, as a part-time Assistant Professor at the Faculty of Medicine in Sofia University "St. Kliment Ohridski", he has conducted a total of 391 hours of practical classes for students of IIIrd and IVth year Educational and Qualification Degree Master of Medicine and Educational and Qualification Degree Bachelor of Nursing and Medical Rehabilitation. During the 2019/2020 academic year, as a part-time Assistant Professor at the Department of Internal Diseases of the Faculty of Medicine in MU-Sofia, he has experienced 240 class academic hours in Bulgarian and English.

He has participated in the practical training of 3 specialising physicians in Cardiology. For the period from 2015-2019, it consisted of overall 924 academic hours.

As far as teaching and learning activities are concerned, both candidates meet the required minimum according to Regulations of the Law and the Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions development of the academic staff at the University "Prof. Dr. Asen Zlatarov"-Burgas.

Conclusions:

Dr. Petya Kamenova and Dr. Svetlin Tsonev are worthy candidates and meet the requirements for holding the administrative position "Associate Professor". Both of them are established professionals in the field of Internal Medicine, with in-depth knowledge and skills, especially in the field of cardiovascular disease and endocrinology, with excellent professional training and proven qualities. Dr. Kamenova has advantages in terms of teaching and teaching activities due to her many years of teaching experience, classroom workload and the creation of a curriculum, tests and lecture courses. On the other hand, the scientific production of Dr. Tsonev is more voluminous and diverse. At the same time, it was achieved in a much shorter time - three quarters of the evidence papers are during the last 10 years which is a sign of very high productivity. His participation in various publications and scientific participations is more evenly distributed as a place in the list of authors which suggests a greater ability to work in a team. In addition, he has an advantage in terms of various activities and leading positions in scientific societies and even in Natioana Accreditation Agency, despite his relatively young age.

Although both nominated candidates meet the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions and the development of the academic staff at the University "Prof. Dr. Asen Zlatarov"-Burgas, the above mentioned arguments justify my recommendation to the esteemed members of the scientific jury to vote positively for adjudication of the academic position "Associate Professor" to Dr. Svetlin Nedkov Tsonev, MD.

12.02.2021

.....
/Prof. Dr Yoto Trifonov Yotov, PhD/

Appendix

Table 1

Dr Petya Kamenova

Type of public ations	Monography /habilitation equivalent Class B	G5	G6	G7	G8	G9	Unreviewed papers	International and National congresses and meetings	Total
Single author	8	-	-	1	10	-	7	20	46(58%)
I-st author	8	-	-	-	-	-	1	8	17(22%)
II-rd author	-	-	-	1	-	-	-	2	3(4%)
III-rd author and after III-rd author	-	-	-	3	2	-	-	8	13(16%)
Total	16	-	-	5	12	-	8	38	79

Dr Svetlin Tsonev

Type of public ations	Monography /habilitation equivalent Class B	G5	G6	G7	G8	G9	Unreviewed papers	International and National congresses and meetings	Total
Single author	-	-	1	-	1	3	1	38	44(37%)
I-st author	2	-	-	7	3	-	4	5	21(18%)
II-rd author	1	-	-	1	2	-	2	3	9(8%)
III-rd author and after III-rd author	9	-	-	12	5	-	8	10	44(37%)
Total	12	-	1	20	11	3	15	56	118