the Chairman of the Scientific Jury, designated by a written order Nr. P-109-176/03.06.2020 of the Rector of the Medical University – Varna

#### **STATEMENT**

Assoc. Prof. Dora Konstantinova Zlatareva, MD, PhD
Department of Diagnostic Imaging, Medical University of Sofia
External Member of the scientific jury designated by a written order Nr. P-109176/03.06.2020 of the Rector of the Medical University – Varna

Concerning competition for academic positions "Associate Professor" in area of Higher education 7. Healthcare and sport, professional branch 7.1. Medicine, Scientific specialty: Diagnostic Imaging for the needs of the specialty "Technician" - Medical College Varna, and Department of Diagnostic Imaging, University Hospital "St Marina" Varna Announced in the State Newspaper, Issue 8/28.01.2020

There is one candidate: Assistant Georgi Nikolaev Valchev, MD, PhD who has applied for the position.

Reviewer: Assoc.Prof. Dora Konstantinova Zlatareva, MD, PhD

Scientific specialty: Diagnostic Imaging

Institution: Department of Diagnostic Imaging, Medical University of Sofia

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The materials submitted electronically for review correspond to the requirements of the Rules of Medical University Varna for the occupation of JSC "Associate Professor".

## 1. Biography and career

Georgi Nikolaev Valchev, MD, PhD was born on 24. 07.1987 in Varna. He graduated First English language school "Varna in 2006. From 2006 to 2012 he studied medicine at Medical University "Prof. Paraskev Stoyanov" Varna. From 2013 till 2017 he has been specializing at Department of Diagnostic Imaging, University Hospital "St Marina" Varna and he obtained specialty in 2018. During 01.07.2013 - 28.10.2013 he worked as an assistant at the Department of Diagnostic Imaging, University Hospital "St Marina" Varna. From 28.10.2013 till now he has been working as an assistant at the Higher School sepcialty "Technician" Medical College Varna, Medical University "Prof. Paraskev Stoyanov" Varna.

In 05. 2018 he was awarded a PhD degree with Thesis "Classification and selection of Image defined risk factors in neuroblastoma".

Dr Valchev performs imaging guided percutaneous interventions and magnetic resonance of the heart.

He is fluent in English and German language.

The candidate is a member of Bulgarian association of Radiology and European Society of Radiology (ESR). He has presented several posters at ECR Vienna, Austria.

# 2. Assessment of the quantitative and qualitative indicators of the applicant's research, scientific work and applied research activity

The publications submitted for review by number and type meet the requirements of the regulations of MU Varna for the occupation of academic position "Associate Professor". One PhD Thesis is presented, one monograph and a chapter from collective monograph, as well as a translation of a chapter in a textbook in clinical radiology.

The total number of published articles is 37. Of these, in international and Bulgarian journals referred and indexed within the world-largest abstract and citation database of peer-reviewed literature, i.e. Scopus and Web of Science -9, Publications in peer-reviewed non-referred international and Bulgarian journals or in edited scientific event proceedings-28, of them international-8. Three of the presented articles are included in the PhD thesis.

Participation in scientific forums in Bulgaria with published abstracts-7, at international conference-1.

Dr Valchev fully meets the minimum national requirements for the academic position "Associate Professor" in the group of indicators A, B, $\Gamma$ ,  $\Pi$ , concerning scientific publishing activity and citations of his publications in referred and indexed journals within the world-largest abstract and citation database of peer-reviewed literature. The presented reference certifies that the applicant fully complies with the minimum national requirements for the academic position "Associate Professor" in terms of the total number of published scientific papers in all group of indicators.

Examples of an assessment and recognition for the scientific works of the candidate are two received awards: 1. Honorary badge of MU Varna for illustrations in a foreign magazine, 2008; 2. Certificate of Merit at the European Congress of Radiology 2016 for Pulmonary-renal Syndromes- Comprehensive Review.

Dr Valchev is a participant in 3 national research projects, two of which study the cardiovascular risk in patients with long-term type 1 diabetes

### 3. Assessment of the monographic work

Monographic work "Neuroblastoma- nature and Diagnosis" presents a detailed and contemporary literature review of the diagnostic, epidemiological, pathogenetic aspects and potential risk factors for neuroblastoma, describes findings in various imaging methods and offers guidelines for interpretation.

The author's experience is presented and attention is paid to the relationship between certain image defined risk factors and long-term survival.

The contributions are of original and scientific-theoretical and applied nature.

# 4. Main scientific and scientific- applied contributions

PhD Thesis "Classification and selection of Image defined risk factors in neuroblastoma" presents a study of the influence of individual image-defined risk factors on survival. Protocols for CT and MRI examination in NBL and and checklist for image analysis have been developed and applied. The contributions are of practical and scientific- applied nature.

The chapter of the collective monograph is devoted to transcranial Doppler US and intravascular Doppler ultrasound. Practical tips for conducting the study and interpreting the images are presented.

Some of Dr Valchev's articles are related to neuroblastoma, some of which are part of PhD thesis. Another topic of interest of the candidate's scientific production are advanced diagnostic techniques — MRI of the heart, mammography tomosynthesis, automated ultrasonography of the breast, ultrasonography of the whole breast, capsule endoscopy. Six articles are devoted to interventional radiology.

The author demonstrates skills for working in a multidisciplinary team in conducting therapeutic interventions and analysis of the data obtained. Areas of application are liver metastasis, mechanical jaundice, and arterial embolization. Dr Valchev has articles in the field of urology in particular abnormalities of the urinary system in children and cystic formation of the kidneys.

Pediatric radiology is present as an object of scientific research: postopertive complications of liver transplantation in children as well as congenital urinary abnormalities have been studied. Dr Valchev has articles together with students of specialty "Technician" which he teaches. These are reviews of image diagnostic methods in disease of the breast and GIT.

In general, the works of the candidate have scientific- theoretical and scientific- practical significance and touch on current topics of imaging. They are characterized by diversity-diagnostic radiology, interventional methods, training- creating digital schemes and illustrations for teaching.

# 5. Impact of (citing) the candidate's publications in national and foreign literature (publication image)

Citations 7

- 1. Number of citations, referred and indexed in global databases 5
- 2. Number of citations in peer-reviewed non-referred journals 2

Dr Valchev has registered active scientific profiles in Google Scholar and Research Gate. His hindex is 1.

# 6. Comprehensive qualitative evaluation of the teaching activities

The teaching activities of Dr. Georgi Valchev started in 2013 with his appointment as Assistant Professor at the Department of Diagnostic Imaging MU Varna. He worked at the Department from 28.10.2013 till 01.02.2018. Since 28.10.2013 he has been an assistant at a Higher school, Medical College Varna, Medical University "Prof. Paraskev Stoyanov" Varna where he has been teaching technicians. The articles in collaboration with students are a proof of his teaching abilities. Participation in the creation of illustrations, textbooks and manual contributes to building the overall image of the candidate.

The provided reference for average annual teaching hours shows that the candidate meets the standard for teachers at MU Varna.

#### 7. Critical remarks

Some of the articles are mentioned by the candidate several times in separate scientific direction when describing the scientific contributions. This creates a false impression of a larger scientific

production, although Dr Valchev has enough articles to meet the criteria of MU Varna for the current competition.

Some of the articles are reviews and do not have the originality of scientific research. As a recommendation, the candidate could conduct research in these areas resulting in his own data and conclusions.

#### **CONCLUSION**

The scientific production presented by Dr Valchev covers current topics and modern imaging methods that is proved by the presence of citations in peer-reviewed journals. His teaching activity to technicians meets the standard for teachers at Medical University Varna.

Based on the above metrics, which fully cover the requirements and accepted evaluation criteria of the Medical University Varna, I recommend the esteemed members of the scientific jury to vote positively on the appointment of Dr. Georgi Nikolaev Valchev for the position of the Associate Professor.

3.8.2020 Sofia

Dora Konstantinova Zlatareva, MD, PhD