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## TO THE PRESIDENT OF THE SCIENTIFIC JURY AT SU "SV. KLIMENT OHRIDSKI" - SOFIA APPOINTED BY ORDER NO. RD-38-277/29.5.2023. OF THE RECTOR OF SU

# REVIEW

## by Prof. Dr. Silvia Bogdanova Tsvetkova-Trichkova, MD, PhD,

Head of the Department of Diagnostic Imaging, FM, Medical University - Plovdiv

#### About

Competition for the academic position of "Professor" in the field of higher education 7. "Health and Sport", professional field 7.1. "Medicine", scientific specialty "Diagnostic Imaging".

#### Information about the competition

The competition is announced for the needs of the Department of Physics, Biophysics and Roentgenology at the Faculty of Medicine of Sofia University "St. Kliment Ohridski". The competition notice was published in the State Gazette No 35 of 18 April 2023 and on the website of SU.

On the basis of the Rector's Order No. RD-19-327/27.09.2021, documents were submitted electronically by one candidate **Assoc. Prof. Dr. Georgi Vasilev Hadjidekov** within the legal deadline.

All legal requirements concerning the procedure of the competition have been complied with. The candidate's documents are comprehensive and in full compliance with the legal requirements for admission to the competition for the academic position of **Professor** at Sofia University "St. Kliment Ohridski".

#### **Reason for submitting the review**

Member of the scientific jury of the competition, according to Order No. RD-38-277/29.5.2023 of the Rector of Sofia University. At the first meeting of the Scientific Jury on 03.07.2023 I was appointed as a reviewer.

The review was prepared in accordance with the requirements of the Law of Development of the Academic Staff of the Republic of Bulgaria (LDASRB) and the Regulations on the terms and conditions for acquiring scientific degrees and occupying academic positions at Sofia University "St. Kliment Ohridski" (RTCASDOAPSU).

#### Biographical data about the candidate

Assoc. Prof. Dr. Georgi Hadjidekov completed his secondary education in 1994 at the 9th French School, Sofia, and in 2000 - medicine at the Medical University -Sofia. Since 2006 he has had a recognized specialty in Diagnostic Imaging. In 2011 he successfully defended his educational and scientific degree "Doctor" with a dissertation on magnetic resonance urography in childhood.

Assoc. Prof. Dr. Georgi Hadjidekov started his academic development as Assistant Professor in 2007 and in 2013 he was elected Associate Professor. In 2014 he defended his Master's degree in Health Management.

Associate Professor Hadjidekov underwent numerous specialization and improvement courses abroad - Besançon, Zurich, Prague, Rome, Brussels and others. He is a member of a number of international scientific and professional organizations: the European Society of Radiology (ESR), the European Society of Paediatric Radiology (ESPR), the European Society of Uroradiology (ESUR), as well as the Bulgarian Association of Radiology, the Bulgarian Society of Clinical Densitometry and others.

He is fluent in written and spoken English and French.

At the date of submission of the documents for the competition, Associate Professor Hadjidekov has over 22 years of experience as a physician, of which over 16 years in the specialty of Diagnostic Imaging.

## Fulfillment of the requirements for the AP "Professor"

## Assoc. Prof. Dr. Georgi Vassilev Hadjidekov, PhD has met and even far exceeds the minimum national requirements for the AP "Professor".

**Indicators Group A:** They include the requirement of a defended dissertation, which covers 50pts. Evidence of this is provided.

**Indicators Group B**: For this group of indicators, Assoc. Prof. Hadjidekov covers 189 points, against the required 100.

**Indicators Group G:** This includes the submitted publications. Assoc. Prof. Hadjidekov submitted **59 publications**, all of them in full text and **after** holding the academic position of Associate Professor, distributed as follows:

- **38** in journals refereed and indexed in world-renowned databases of scientific information, of which **9** in publications with **IF**,

- 18 in non-refereed peer-reviewed journals,

- 2 published chapters in collective monographs,

- published university textbook - 1

This significantly exceeds the mandatory minimum of publications. In this group of indicators Assoc. Hadjidekov has **682.20** points against the required **200** (**561.78 points for D.7, 103.75 points for D.8 and 16.67 points for D.9);** 

Relevant evidence has been provided.

Indicators Group D: they include the total number of citation points. In this group, Assoc. Prof. Hadjidekov has achieved 2040 points, against the required 100; A list and supporting material is presented for 149 citations of publications, only after obtaining the academic position "Associate Professor", of which 110 in journals refereed and indexed in world-known databases, out of a total of 157 available citations and h-index = 7 according to the official Scopus database (excluding self-citations) is attached. Indicators Group E: Achieved 138.33 points against the required 100 points.

#### Synthesized assessment of the main scientific and applied contributions

Assoc. Prof. Dr. Georgi Hadjidekov, MD has extensive clinical and diagnostic experience in various areas of diagnostic imaging. His scientific interests are in several directions:

#### 1. Diagnostic imaging of the female reproductive system.

The possibilities of magnetic resonance imaging for visualization of congenital abnormalities of the uterus and their determination according to the most modern classifications have been studied. The major classes of fetal defects are illustrated with the author's own observations from clinical practice, evidence of extensive clinical experience. The magnetic resonance images presented, covering the full range of uterine congenital anomalies, is an excellent illustration of the superiority of the method over ultrasound and is a reference for imaging specialists, obstetricians and geneticists in determining diagnosis and management in clinical practice.

The contribution of 3T MRI in uterine fibroids is discussed, with typical, rare and incidental findings. In an original study, the issue of 3T MRI of space-occupying processes in the adnexa, their classification and preoperative evaluation is addressed. The study involved the use of magnetic resonance malignancy criteria based on widely accepted literature data.

### 2. Magnetic resonance fetal and perinatal imaging.

A study was done on the comparative study of two-dimensional measurements from ultrasound and magnetic resonance imaging on the one hand and volumetric segmentation in different degrees of fetal ventriculomegaly. A DICOM database has been created, and the results obtained for different gestational ages can be the basis for future establishment of quantitative norms of fetal cranial structures, allowing early detection of abnormal fetal brain development and ventriculomegaly.

#### 3. Imaging diagnosis of tumors and complications

Different types of ovarian teratomas, uterine tumors-primarily myomas, pulmonary metastases from different primary localizations, and some rare tumors have been studied in detail.

#### 4. Variations in anatomy

Large-scale diagnostic work has allowed the discovery and demonstration of a number of interesting variations in the anatomy of the human body. In 84 candidates for liver transplantation donors, for example, variations in anatomy relevant to subsequent intervention were identified.

## 5. Diagnostic imaging in abdominal surgery

Rare complications accompanying surgically treated conditions are described.

#### 6. Imaging of the urinary system

Rare observations from general practice include case reports in the field of uroradiology such as spontaneous rupture of a kidney in pregnancy and a case of urethrolithiasis. The use of low-dose 64-slice computed tomography in the diagnosis of nephro- and ureterolithiasis, renal tumors, and other conditions has also been developed.

#### 7. Methods of interventional diagnostics

In the course of specialization abroad, as a part of the collective developing and applying modern neuroradiological interventional methods for pain treatment, the contribution of minimally invasive interventional methods in pain syndrome of different origin has been proven, described and confirmed. In a separate chapter of a 2021 Elsevier Masson textbook, Bone Interventional Radiology, interventional methods for the treatment of pain syndrome are reviewed.

#### **Evaluation of the teaching and learning activity**

Assoc. Prof. G. Hadjidekov teaches medical students both in Bulgarian and English language, participates in the conduct of lecture basic courses of postgraduate students in diagnostic imaging, as well as in the practical training of the same, hi has supervised 7 postgraduate students who successfully passed the state examination for the acquisition of the specialty "Diagnostic Imaging". Assoc. Prof. Hadjidekov also participats in the state examination committee for the acquisition of the specialty "Diagnostic Imaging".

From the attached reference of teaching load issued by the Faculty of Medicine of Sofia University "St. Kliment Ohridski", it is evident that during the academic years - from 2017/2018 to 2022/2023 (winter semester), the teaching load of Associate Professor Hadjidekov is 681.8; 796.4; 348; 767.6; 558.2; 287.8 hours per year, respectively, which is significantly above the required, with a total of 91 hours of lectures and 942 hours of practical exercises for the last 5 years in English.

## Conclusion

Associate Professor Dr. Georgi Vassilev Hadjidekov, Ph.D. is an established specialist, experienced teacher and scientist with an affinity for scientific work. The documents, publications, citations and evidence presented in the competition convincingly show that Assoc. Prof. G. Hadjidekov, PhD meets the requirements for quantitative and qualitative indicators of scientific and teaching activity for holding the academic position of "**Professor**" in accordance with the requirements of the Law of Development of the Academic Staff of the Republic of Bulgaria (LDASRB) and the

Regulations on the terms and conditions for acquiring scientific degrees and occupying academic positions at Sofia University "St. Kliment Ohridski" (RTCASDOAPSU).

On the basis of the above arguments and evidence, I confidently recommend to the esteemed members of the Scientific Jury to award to Assoc. Prof. Dr. Georgi Vassilev Hadjidekov, PhD the academic position of "Professor" in the field of higher education 7. "Health and Sport", professional field 7.1. "Medicine", specialty "Diagnostic Imaging" at the Department of "Physics, Biophysics and Roentgenology" at the Faculty of Medicine of Sofia University "St. Kliment Ohridski".

15. 08. 2023г. Plovdiv Signature: .....

(Prof. Dr. Silvia Bogdanova Tsvetkova-Trichkova, MD)