

Opinion

by Prof. Dr. Boyan Balev, PhD,
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appointed by Order of the Rector of SU "St. Kliment Ohridski" No. RD-38-284/5.6.2023 for a member of the jury of a competition for the academic position of "Professor" in the field of higher education 7. "Health and sport", by professional direction 7.1. "Medicine" and scientific specialty "Imaging diagnostics" for the needs of the Department of Imaging Diagnostics of the Ministry of Health of Sofia University, on the basis of the Imaging Diagnostics Clinic at the UMBAL "Alexandrova" EAD, announced in the Government Newspaper, no. 35 dated 18.04.2023

Documents were submitted electronically by one candidate: Assoc. Dr. Georgi Vasilev Hadzhidekov, doctor of medicine. The committee for admitting candidates to the competition for professor, according to Art. 119, para. 2 of the Regulations on the terms and conditions for acquiring scientific degrees and occupying academic positions at SU "St. Kliment Ohridski", examined the documents and admitted the candidate to the competition, which was certified by a protocol presented to the jury within the legally regulated period.

1. Brief biographical data

Prof. Hadzhidekov was born in 1976 in Sofia. After completing his secondary education in 1994, he studied medicine in Sofia until 2000. Since 2006 he has been a specialist in imaging diagnostics, and since 2011 he has obtained the scientific degree "doctor" after defending his dissertation work. In 2013, he was elected as an associate professor at the Ministry of Finance of SU "Kliment Ohridski", UMBAL "Lozenets" base, where he works until now.

2. Публикационна активност

Scientific papers (after associate professor)	
1. Full-text publications in refereed and indexed journals	59
1.1. Publications in scientific journals with IF	(9)
1.2. Publications in international and Bulgarian journals referenced and indexed in world-famous databases with scientific information (incl. 1.1.)	38
1.3. Publications in Bulgarian and international reviewed scientific journals	18
1.4. Monograph chapter.	2
1.5. University issue	1
2. Presented at congresses, conferences and other scientific forums	45
3. Scientific projects	3
4. Published reviews	9
Total papers	116

The scientific papers of assoc. Dr. Georgi Hadzydekov have been cited a total of 149 times (after acquiring the academic position of "Associate Professor"), of which 110 in international and Bulgarian journals referenced and indexed in world-famous databases with scientific information.

2. Scientific contributions

The papers of Assoc. Dr. Georgi Hadzhidekov have been published mainly in authoritative international journals, the magazine "Radiology and X-rays", an organ of BAR, and the annual book of the Sofia University "St. Kliment Ohridski". They are dedicated to different areas of imaging diagnostics and reflect a wide, diverse and significant diagnostic practice:

I. Image diagnostics in obstetrics, gynecology and prenatal magnetic resonance diagnostics.

Along with the confirmatory contribution to congenital diseases of the uterus, the developments dedicated to fetal magnetic rhizodiagnosis are of contribution value. Prof. Hadzhidekov is a pioneer in this specific field. A number of publications demonstrate the author's observations of cases with fetal pathology, demonstrating extensive clinical experience. Through own observations and research protocols, the importance of fetal magnetic resonance examination in agenesis of corpus callosum, lymphangiomas, neural tube pathologies, myelomeningocele has been confirmed. Early diagnosis of defects in fetal development is essential for prognosis. Through own observations, a parallel is presented with the ultrasound examination of the fetus in holoprocencephaly, acrania, changes in the posterior cranial fossa, spina bifida, changes in the abdominal wall, urinary tract, bronchopulmonary sequestration, congenital lobar emphysema, congenital diaphragmatic hernia, etc.

II. Imaging diagnostics in oncology.

The studies dedicated to gynecological tumor diseases included a large number of patients (124 with ovarian and 41 with uterine tumors) in which proprietary MRI protocols were applied. Many casuistic findings have also been demonstrated.

III. Imaging in pediatrics.

From the beginning of his practical activity, Associate Professor Hadzhidekov showed a focus on the pediatric field, to which his dissertation work was also dedicated. Diagnostic options are explored and laparoscopic treatment for Zinner's syndrome is addressed. CT is highlighted as the method of choice for pulmonary complications of cystic fibrosis.

IV. Anatomical variants, rare diseases and genetic syndromes.

V. Image diagnostics of abdominal and urological surgical diseases.

Of a contributing nature are the demonstrated, albeit anecdotal, cases of recognized complications before or after surgical intervention, on the occasion of liver transplantation.

VI. Interventional radiology.

The candidate presents interventional pain management methods in a separate chapter of the 2021 Elsevier Masson edition. One large study addressed bipolar radiofrequency ablation for refractory pain in spinal metastases and infiltration of neural structures under computed tomography guidance. Individual publications have a confirmatory contribution to the application of minimally invasive interventional methods in pain syndromes of different origin.

VII. Magnetic resonance imaging technique and protocols

An algorithm for extracting contrast-enhanced signals from magnetic resonance imaging (MRT) images of an experimental 7.0T magnetic resonance imaging using an ImageJ script was developed in co-authorship with a team of Bulgarian and Japanese scientists. Another study is dedicated to visualizing the production of superoxide in the dopaminergic area of the brain, which is important in the diagnosis of Parkinson's disease, Alzheimer's disease, schizophrenia, epilepsy, etc. The contribution in presenting the advantages of diffusion and perfusion magnetic resonance techniques in the assessment of adnexal formations is also significant.

VIII. Imaging diagnostics in the musculoskeletal system.

The periepiphyseal areas of edema in the distal femur and proximal tibia are described in the differential diagnosis of childhood fractures, stress fractures, contusion foci, multifocal recurrent osteomyelitis, etc.

3. Evaluation of the candidate's pedagogical activity

The educational workload (auditory and non-auditory employment) of Associate Professor Hadzhidekov is certified by a document from the Rector of the Sofia University, according to which he exceeds the standard, including the teaching of English.

The candidate is the supervisor of seven successfully defended doctoral students.

4. Critical notes – no critical notes

5. Conclusion

Assoc. Dr. Georgi Hadzhidekov is an established, erudite Bulgarian specialist with great scientific potential and clinical experience. The scientific production presented by him covers current topics of medical practice and modern imaging methods. It enjoys an indisputable authority not only among imaging specialists, but also among other clinical specialties.

Based on the presentation made, including a comprehensive evaluation and analysis of the candidate's activity and according to the requirements and accepted evaluation criteria of Sofia University, I find it reasonable and convinced to propose to the respected scientific jury Assoc. Dr. Georgi Hadzhidekov, MD to award the academic position "Professor".

16 Aug 2023 r

Varna

Signature:

Prof. Boyan Balev