

ACADEMIC OPINION

By Assoc. Prof. Tonny Avramov, PhD
Department of Neurosurgery and ENT diseases
Medical University "Prof. Paraskev Stoyanov MD" - Varna

Regarding the procedure for academic degree "Professor" in the field of "Neurosurgery", professional field 7.1 Medicine, field of higher education 7. Health and Sports - single (0.25 full-time position) for the needs of the Department of Neurosurgery and ENT Diseases at the Medical Faculty.

The academic contest for the academic degree "Professor" is according with order №P-100-395 / 31.07.2020 and in conformation with the announced in SG No. 53 / 12.06.2020 also in accordance with a report with ent. № 102-1600 / 08.07.2020 by Prof. Yavor Petkov Entchev, MD, PhD - Head of the Department of Neurosurgery and ENT Diseases and decision protocol № 26 / 13.07.2020. of the Faculty Council of the Medical Faculty at MU - Varna.

The scientific jury was appointed by order № P-109-299 / 07.08.2020. of the Chancellor of MU - Varna.

One candidate participates in the competition - **Assoc. Prof. Dr. Vasil Hristov Karakostov, Ph.D.** He graduated from medical school in 1982. in MU - Plovdiv. He is currently the **head of the University Clinic of Neurosurgery at the University Hospital "St. Ivan Rilski LLC - Sofia and Associate Professor in the Department of Neurosurgery at the Medical University of Sofia. He also is a national Neurosurgery consultant.**

Brief biographical data:

- Head of the Clinic of Neurosurgery - from 26.04.2017 until now.
- Head of the Department of Spinal Neurosurgery at the Clinic of Neurosurgery of the University Hospital "St. Ivan Rilski" from March 21, 2008 to April 26, 2017.
- In 2007 was elected "Associate Professor" in the scientific field of "Neurosurgery" at MU - Sofia
- Chief Assistant at the Clinic of Neurosurgery at the University Hospital "St. Iv. Rilski LLC - Sofia from April 1, 1998 to 2006
- Senior Assistant at the Clinic of Neurosurgery from April 9, 1991 to 1998.
- Assistant at the Clinic of Neurosurgery from January 25, 1988 to 1991.
- District neurosurgeon at the District Hospital - Smolyan. 17.05.1986 - 1988
- Clinical ordinator in the Clinic of Neurosurgery at the Medical Academy - Sofia 16.05.1983 - 1986
- Pediatrician at the District Hospital - Smolyan. 01.12.1982 - 1983

Recognized diplomas:

1. Medical University - Sofia. Educational and scientific degree "**Associate Professor**" - High Attestation Commission - Certificate for scientific title №24046 / 29.01.2007.
2. Medical University of Sofia. Educational and scientific degree "**Doctor**" - High Attestation Commission - diploma № 29293 / 23.08.2004.

3. Medical University - Sofia. Faculty of Public Health.
4. Health Management - Master. Medical University diploma №029730 / 20.05.2013
5. Medical University - Sofia. Awarded "Neurosurgery" specialty. Diploma №29753 / 16.05.1986

Assoc. Prof. Dr. Vasil Karakostov is:

- External expert at the Supreme Accreditation Council at the Ministry of Education and Science - from 2012 to 2019.
- Expert for the Accreditation Council at the Ministry of Education
- Member of the BDA
- Member of the Bulgarian Scientific Society of Neurosurgery
- Co-chair of the Balkan Association of Spinal Surgery
- Chairman of the Board of Neurosurgery of the BDA
- Member of the editorial board of the journal "Bulgarian Neurosurgery"
- Deputy Chairman of the Scientific Council at the University Hospital "St. Ivan Rilski" - from 23.09.2018 until now

In 2006 was elected "Associate Professor of Spinal Neurosurgery" at MU - Sofia.

He did residency in stereotactic neurosurgery in 1998-1999 and in 2004.

Between 2005 -2007 he specialized in spinal microneurosurgery under Prof. M. Meyer in Munich. He has had many residencies in Europe and the United States. He was elected as a lecturer and demonstrator for the European branch of the World Spine Association - AOSpine.

In 2010 he was awarded the Platinum Status Award for spinal surgery - Platinum Member of AOSpine Europe. He is a member of many European and World-wide neurosurgical organizations and societies.

Research activity:

Assoc. Prof. V. Karakostov presented a list of 176 scientific papers, 53 of which were used for the acquisition of scientific degree "Doctor" and "Associate Professor", 82 scientific papers were published after the acquisition of academic degree "Associate Professor". The scientific works of Assoc. Prof. Karakostov include a thesis for acquiring the scientific degree "Doctor" named - **"Stereotactic interventions in brain processes"**.

He is the sole author of a monography named: **Osteoporotic and pathologic vertebral fractures. Percutaneous techniques for augmentation, Sofia, 2019.** He also co-authored a scientific paper - monography: **Modern technological advancements in operative neurosurgery.**

The scientific works of Assoc. Prof. Karakostov are thematically distributed in almost all areas of neurosurgery, with an established predilection towards spinal surgery. More than 30 scientific papers and one monography are dedicated to spinal surgery. In the field of neurooncology - 16 scientific publications are presented, examining the issues in the surgical treatment of pediatric patients with tumors of the central nervous system. There are over 10 publications addressing the issues of operative techniques in modern neurosurgery - brain mapping, intraoperative neuronavigation, neuroendoscopy and intraoperative electrophysiological neuromonitoring, as well as deep brain stimulation. Special surgical techniques such as tri-ventriculostomy and endoscopic aqueductoplasty are discussed with regards to hydrocephaly and the congenital malformations of the CNS. The section on functional neurosurgery presents the thesis concerning the problems in the treatment of drug-resistant forms of epilepsy through stereotactic technology and deep brain stimulation in patients under "awake craniotomy". Scientific publications dedicated to modern interventional methods for the treatment of vascular diseases of the CNS - endovascular procedures for the treatment of cerebral aneurysms and AVM are 9 in total and have been published in renowned scientific journals and also cited many times.

Publications:

The publications of Assoc. Prof. Dr. V. Karakostov, Ph.D. in Bulgarian and foreign periodicals are 79, 5 of which are in referenced scientific journals and indexed in a world database. The remaining 74 scientific papers have been published in non-peer-reviewed journals and collective editions, 57 in Bulgarian and 25 in English.

Participation in congresses in Bulgaria and abroad:

The scientific activity of Assoc. Prof. Dr. V. Karakostov, Ph.D. is demonstrated by numerous participations with presentations in prestigious scientific sessions and forums both in Bulgaria - 34 and abroad - 16. From the presented data there are 81 citations in total, of which 37 in Scopus database, 13 in foreign databases with an h-index of 4. Total impact factor of the publications is 28.41.

Tutoring activity:

The academic activity of Assoc. Prof. Dr. Vasil Hristov Karakostov, Ph.D. consists of conducting systematic lecture-courses and exams for Bulgarian and foreign students at MU - Sofia. He lectures in Bulgarian and English, which in 2019-2020 totals 216.5 hours. His extracurricular employment as Head of individual training for residents in "Neurosurgery" is 98 hours while his tutoring activity totals 32 hours.

As a research supervisor, Assoc. Prof. V. Karakostov has prepared two PhD students who have successfully presented their dissertation-thesis for the academic degree of "Doctor" in the scientific field of "Neurosurgery": Dilyan Valentinov Ferdinandov, MD, PhD - in 2013 and Stiliana Ilieva Mihailova, MD, PhD - in 2019.

Assoc. Prof. Dr. Vasil Karakostov, Ph.D. fully covers the minimally required and mandatory criteria, which are announced in the Law on the Implementation of the Rules of Procedure and the Rules for Development of the Academic Staff of MU - Varna. The minimum required points by groups of indicators for academic degree "Professor" according to the Requirements are presented in the following table:

GROUPS OF INDICATORS	CONTENTS	PROFESSOR ^[1] _{ISEP} / NUMBER OF POINTS REQUIRED /	Associate Professor V. Karakostov /number of points achieved/
A	Indicator 1	50	50
B	Indicator 2	-	-
C	Indicators 3 and 4	100	100
D	Sum of Indicators 5 to 9	200	222
E	Sum of Indicators 10 to 12	100	1340
F	Sum of Indicators 13 and beyond	100	290

Scientific contributions of Assoc. Prof. Dr. V. Karakostov

- For the first time in the Bulgarian scientific literature, the methodology of CT-based stereotactic interventions (stereotactic biopsy, stereotactic craniotomy, stereotactic localization and stereotactic extirpation) and indications for its uses are described and introduced in routine neurosurgical practice. He also pioneered the practice of "serial stereotactic biopsy", which clearly improves the relevant histologic information.
- One of the main scientific contributions of Assoc. Prof. Karakostov is focused on the most common and socially significant diseases in the field of neurosurgery, such as the consequences of osteoporotic syndrome and vertebral neurooncology. His scientific works, which focus on the introduction of minimally invasive percutaneous techniques of vertebral augmentation in pathologic and osteoporotic vertebral fractures, are strong contributions to the field as whole.
- The natural culmination of his interests and scientific researches in the field, is the monography "Osteoporotic and pathologic vertebral fractures. Percutaneous augmentation techniques" in 2019. In this book, Assoc. Prof. Karakostov describes in a very detailed and analytical way, the emergence and development of percutaneous techniques for augmentation of osteoporotic and pathologic vertebral fractures, their epidemiological aspects and specifics. In this monography the author for the first time in the Bulgarian scientific literature makes a synthesized analysis and comparison of the data on the specific incidence of osteoporosis and osteoporotic vertebral fractures in different regions of the world and correlates the data with the one we have in Bulgaria.

Conclusion:

Based on the presented data from the research, publishing, teaching and diagnostically-operative activity of Assoc. Prof. Dr. Vasil Hristov Karakostov, Ph.D. I conclude that the candidate meets the requirements and criteria for acquiring the academic degree of "Professor" in the scientific field of "Neurosurgery", defined in the Law on the Development of Academic Staff of the Medical University of Varna. His publications are 176, he has a doctoral dissertation, he is the author of an independent monography, his academic workload exceeds the norm, he has a high citation rate and impact factor, he has prepared two doctoral students who have successfully defended their PhD thesis, he has completed many residencies abroad and was awarded the prestigious international recognition in 2010 - "Platinum status" for spinal surgery as a Platinum Member of AOSpine Europe.

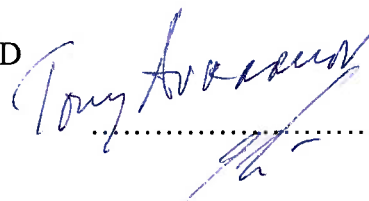
Assoc. Prof. Dr. Vasil Hristov Karakostov, Ph.D. is an established neurosurgeon with over 35 years of experience, who performs on a daily basis highly specialized and high-tech surgical interventions in all areas of operative neurosurgery. Fluent in written and spoken English, Russian and German.

Based on the above facts, I conclude that the candidate meets the criteria and requirements for the academic degree of "professor" and I give my positive vote for the election of Assoc. Prof. Dr. Vasil Hristov Karakostov, Ph.D. to be awarded the academic degree of "Professor" in the scientific field of "Neurosurgery" for the needs of the Department of Neurosurgery and ENT Diseases at MU - Varna.

19.10.2020 г.

Assoc. Prof. Tony Dankov Avramov, MD, PhD

Гр.Варна

A handwritten signature in blue ink, reading "Tony Avramov", written over a horizontal dotted line.

