

Review

From Prof. Dr. Yavor Enchev, dmn
Chair of the Departments of Neurosurgery and ENT
Medical University Varna
Head of the Clinic of Neurosurgery
UMBAL "Sv. Marina", Varna

For the competition for the academic position
„Professor”
in the scientific area
“Neurosurgery”
for the Department of Neurosurgery
of UMBALSM "Pirogov", Sofia;
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Candidate:

Assoc. Prof. Dr. Venelin Milsolvov Gerganov, dm
Department of Neurosurgery
UMBALSM "Pirogov"
Sofia

Biographical data:

Assoc. Prof. Dr. Venelin Gerganov has been born on the 19th of June 1970 in Sofia. In 1988 he graduated the NPMG, Sofia. In 1996 he graduated the Medical University - Sofia. He did his residency training in neurosurgery in the Departments of Neurosurgery of UMBALSM "Pirogov" and UMBAL "Alexandrovska" and took his board exam in 2005. In this period he had several long-term sub-specializations: the research grant of ÖAAD (Austrian Academic Exchange Office), Vienna, Austria, July-December 1999 and the

Scientific research Grant of the Deutscher Akademischer Austauschdienst (DAAD) in Hannover, Germany, September-December 2003. He presented successfully in the same year his Doctor work "Surgical treatment of vestibular schwannomas" under Prof. Dr. Kiril Romanski and was given the educational and scientific grade "Doctor".

In the period 2006-2019 he was consecutively Assistenzarzt (2006-2008), Funktionsoberarzt (2008-2009), Chief of section intraoperative neuromonitoring (2009-2014), Oberarzt (2009-2014) and Leitender Oberarzt (since 2014) in the International Neuroscience Institute (INI), Hannover, Germany. Since November 2012 he is Associate Professor of neurosurgery in the Medical University of Hannover. The procedure for his full professorship in that University was opened in April 2017.

Assoc. Prof. Venelin Gerganov took part in multiple international neurosurgical congresses and conferences and frequently gave invited lectures.

Assoc. Prof. Venelin Gerganov has been Doktorfather of 3 doktorands in INI-Hannover, two of who have already successfully presented their thesis for the educational and scientific grade "Doctor".

Additional qualification

In 2016 he completed his Master study of Public health in the Plovdiv medical University.

Specializations

He did sub-specializations in the area of skullbase surgery, neuroendocopy, minimally-invasive and image-guided neurosurgery, as well as spinal surgery in Vienna, Austria, in Germany and in the USA.

Assoc. Prof. Venelin Gerganov is one of the closest pupils and associates of the leading neurosurgeon worldwide- Prof. Madjid Samii. He trained in pituitary surgery with Prof. R. Fahlbusch, vascular surgery with Prof. H. Bertalanffy, endoscopic transnasal surgery with Prof. W. Draf and spinal surgery (Prof. J. Harms and AO Spine).

Academic development

Assoc. Prof. Venelin Gerganov received the following grants and awards:

- research grant of the ÖAAD (Austrian Academic Exchange Office, Vienna, Austria, 07-12.1999)
- research grant of the German Academic Exchange Office, Hannover, Germany, 09-12.2003
- International Karl Storz Stipendium for clinical application of neuroendoscopy, 2006-2007
- Award of the European Skull Base Association, the 6th International Congress of the World Federation of Skull Base Societies and 10th European Skull Base Society Congress in Brighton, UK, 16-19.05.2012.

Assoc. Prof. Venelin Gerganov is a member of the following medical/ scientific organizations:

- European Association of the Neurosurgical Societies
- International Society of Neurosurgery Madjid Samii
- Member of the Young neurosurgeons Forum of the WFNS (2005-2008)
- German Society of Neurosurgery
- Bulgarian Society of Neurosurgery
- European Society of Skull base Surgery
- German Society of Skull Base Surgery
- Association of the university lecturers in Germany
- German Society of Neuromodulation.

Assoc. Prof. Venelin Gerganov is honorary member of the:

- Southeast European Neurosurgical Society (SEENS)
- Macedonian Neurosurgical Association.

Research activity

Scientific parameters

- overall citations: 2035 (Google scholar)
- sum impact factors: 137
- A-index: 25 (Google scholar)
- I-10 index: 44 (Google scholar)

Number of publications:

- 60 in journals with impact factor, indexed in PubMed
- 17 in journals without impact factor
- 7 published editorials, letters to the editor (in journals with impact factor indexed in PubMed)
- > 30 published comments (in journals with impact factors, indexed in PubMed Neurosurgery, Neurosurgical Review, World Neurosurgery)

Number of monographs: 1

Number of chapters in textbooks/monographs: 31

Presentations

- 33 presentations at neurosurgical congresses with published abstracts
- 38 presentations at neurosurgical congresses without published abstracts

Invited lectures: 34

1. Member of the Editorial board:

- Clinical Neurology and Neurosurgery: - BioMed Research International
- Neurosurgery Journal

2. Assistant Editor-in-chief:

- Neurosurgical Review (2011-2016)

3. Associate Editor-in-Chief:

- international Neuroscience Journal

4. Reviewer in:

Neurosurgery, Neurosurgical Review, Clinical Neurology and Neurosurgery, Neurology India, J of Neuroimaging, Neuroimage, Neuroscience, International Journal of Computer Assisted Radiology and Surgery, World Journal of Surgical Oncology, Journal of Neurosurgical Sciences, Journal of Neurological Surgery - A, BioMed Research International, Asian Journal of Neurosurgery, World Neurosurgery, J of Neurosurgical Sciences.

Scientific research contributions

The Scientific research contributions of Assoc. Prof. Venelin Gerganov, DM, can be grouped in the following categories:

1. evaluation of new high technological intraoperative imaging methods (intraoperative MRI and ultrasound).

Publication of the results of the first prospective comparative study on the intraoperative MRI and ultrasound in the resection of brain gliomas in the world, published in J Neurosurgery (publication 47 from the publication list, 65 citations). The study showed that the MRI remains the golden standard for intraoperative imaging but the ultrasound is a cheaper and accessible alternative, which allows acquiring almost real-time reliable and accurate images. The main limitation of the ultrasound is the lower specificity of the images when attempting to assess for small tumor remnants.

The remaining publications on the topic are Nr. 21,33,34; 75 citations.

2. Tractography of the cranial nerves and other neural pathways

Evaluation and realization of the tractographic visualization of small cranial nerves, such as N. facialis or N. cochlearis preoperatively. DTI based tractography of these nerves preoperatively and correlation to the intraoperative anatomical findings in order to verify the accuracy of the method. This is one of the first successful tractographic reconstructions of these nerves in the world (publication 35; 79 citations).

Other studies on the tractography (publication 15; 4 citations).

3. Assessment of the benefits and limitations of some novel approaches to the skullbase tumors and the possibilities to improve the outcome (publications 5,12,16,20; 76 citations)
4. Endoscope-assisted surgery of the skullbase tumors- use, advantages, disadvantages (publications 7,18,36,58; 92 citations)
 - Endoscope-assisted retrosigmoid infralabyrinthine approach to the foramen jugulare tumors (publication 7)
 - Endoscope-assisted intradural suprameatal approach for the treatment of trigeminal schwannomas (publication 18)
 - Electrophysiological assessment of the safety of the endoscopic surgery of the skull base (publication 36)
 - endoscope-assisted microsurgery of vestibular schwannomas (publication 58)

Academic activity

The academic activity of Assoc. prof. Dr. Venelin Gerganov extends over many years. He lectured neurosurgery in:

University of Magdeburg, Germany (2007-2009)

Medical University Hannover, Germany (since 2008)

Faculty member, PhD program INI-Hannover and University of Medical Sciences, Tehran since 2013

Clinical activity

Assoc. prof. Dr. Venelin Gerganov performs excellently neurosurgeries that comprise practically all main parts of neurosurgery: neurooncology, vascular neurosurgery, spinal neurosurgery, pediatric neurosurgery, endoscopic neurosurgery, functional neurosurgery, surgery of the peripheral nerves.

Assoc. prof. Dr. Venelin Gerganov has remarkable results in case of complex neurosurgical pathology due to the perfection of his operative technique, the deep analysis of the possible complications and their avoidance, the knowledge of the current neurosurgical literature, and due to his work in one of the best neurosurgical departments in the world.

Personal impressions

I know Assoc. Prof. Dr. Venelin Gerganov since 2001 and had the honor and pleasure to work with him in the Department of Neurosurgery of UMBAL "Alexandrovska", Sofia. He has always impressed with his intellect, knowledge and personality, which were appreciated even by Prof. M. Samii, who proposed him to become part of his team (2006) in INI, Hannover, Germany. With his scientific and research activity in Hannover Assoc. Prof. Dr. Venelin Gerganov became the most published, most frequently cited and most recognizable internationally Bulgarian neurosurgeon. Assoc. prof. Dr. Venelin Gerganov is definitely enrichment for the Bulgarian neurosurgery and will certainly give his essential contribution for its further development. I appreciate his decision for more active participation in the Bulgarian neurosurgical reality.

Conclusion

Assoc. prof. Dr. Venelin Gerganov, DM, fulfills the requirements for the academic position "Profesor" completely:

1. He has unique in their quality and quantity proven original contributions mainly in the area of skull base surgery, elaboration of new approaches to the tumors of the skull base, the cranial nerves and neural pathways tractography, and the evaluation of new high technological intraoperative imaging methods.
2. He has all necessary prerequisites, such as knowledge and skills, to perform effectively surgeries in all parts of the modern neurosurgery.
3. He has obvious qualities of excellent lecturer due to his detailed knowledge of the neurosurgical literature and the current trends.

I recommend the appointment of Assoc. Prof. Dr. Venelin Gerganov as “Professor” in the Department of Neurosurgery of UMBALSM “Pirogov”, Sofia

01.08.2019

Varna

Prof. Dr. Yavor Enchev, DMN