Addressed to the

Academic Jury

Determined with order № P-109-133/22.02.2023 г.

Rector of the Medical University of Varna

# REVIEW

#### Written by

Assoc. Prof. Dr. Konstantin Petrov Georgiev PhD

## Head of ENT Department, Milirary Medical Academy - Varna

## Regarding

Academic competition for the occupation of the academic position "Associate Professor" in professional domain 7.1. Medicine, field of higher education, professional field program "Otorhinolaryngology", in the Department of "Neurosurgery and ENT", MU-Varna.

The review has been assembled in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations on the Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria for the terms and conditions for occupying the academic position of "Associate Professor".

One candidate was allowed to participate in the competition - Dr. Galen Dimitrov Shivarov, PhD, who submitted all the necessary documents in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations on the Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria, also with the Regulation for the Development of Academic council of MU - Varna, certified by protocol from the documentation control committee.

Dear colleagues,

Habilitated doctors are faced with ever increasing demands in modern times. In addition to demonstrating scientific achievements and quality teaching activity, they must perform managerial and administrative functions in the units entrusted to them, where they must solve complex and diagnostic problems. I have known Dr. Galen Dimitrov Shivarov, PhD for over 30 years and I consider that he proudly meets all these requirements. His biography also speaks of it:

## **Brief biography**

Dr. Galen Dimitrov Shivarov, PhD was born on 22.03.1969 in Dobrich, Republic of Bulgaria. He is married with one child.

In the period 1984-1987 he received his secondary education at the III Natural and Mathematical High School in Varna with intensive study of German language.

In 1995 he graduated from the Medical University 'Prof. Dr. Paraskev Stoyanov' - Varna, specialty 'Medicine', Diploma No. 6034/03.12.1995.

In 2005 he acquired a master's degree in 'Health Management', Diploma №022086, №248/28.10.2005 from the Medical University 'Prof. Dr. Paraskev Stoyanov' – Varna.

In the period 1997 - 2001 - he specialized in otorhinolaryngology at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna. In 2001 - acquired a specialty in "Otorhinolaryngology, head and neck surgery".

In 2017, he obtained the degree of 'PhD in Medicine' - with a dissertation on the topic: 'Effectiveness of radiofrequency thermotherapy in hypertrophic rhinopathies', Faculty of Medicine of the Medical University - Sofia.

#### **Completed qualification courses:**

2001 - Course at University Hospital 'Tsaritza Yoanna - ISUL', Sofia in audiometry and otoneurological tests;

2003 - Course at University Hospital 'Tsaritza Yoanna - ISUL', Sofia for surgical treatment of laryngeal diseases, including Oncology;

2003 - Course at University Hospital 'Tsaritza Yoanna - ISUL', Sofia in bronchoesophagology - foreign bodies in the lower respiratory tract;

2007 - Course in Radiofrequency Induced Thermotherapy (RFITT) for daily practice in ENT. Symposium on Celon RFITT;

2011 - Summer Academy - practical dermatology and aesthetic medicine at the Military Medical Academy, Sofia;

2011 - Course - Global Postlaryngectomy Rehabilitation Academy - Amsterdam. Practical course under the guidance of Prof. Hilgers at the Netherland Cancer Institute

1. Surgical placement of voice prostheses after laryngectomy

## 2. Postoperative pulmonary and olfactory rehabilitation

2013 - "Live surgery course of the nose and paranasal sinuses" course - Prof. Wolfgang Pirsig

#### **Professional experience**

The professional experience of Dr. Galen Dimitrov Shivarov, PhD is linked with "Saint Anna" Hospital in Varna, where for the last 8 years, as well as in the period 2010-2012, he was head of the department of ENT diseases. From 2014 to 2015, he was Deputy Director, and in the period 2015-2017 - Executive Director of the health facility. He gained management experience in the period 2009 - 2010, as the medical manager of the "Chaika" DCC - Varna. In the period 2000 - 2009, he took his residency at the ENT Department, "Saint Anna" Hospital, and from 1998 to 2000 – worked as doctor in the ENT admissions in Medical Center IV - Varna. These successes were achieved after a considerable period of work in the periphery of health care - 1997-1998 - ENT doctor in Medical center in Dulgopol, and 1995-1997 - head of the rural health department in the village of Asparuhovo.

He continuously shares his knowledge and skills in the field of medicine with his young colleagues and under his leadership in the period 2007 - 2022, nine doctors were trained and successfully acquired the specialty of ENT diseases.

The areas of scientific and practical interest of Dr. Galen Dimitrov Shivarov, PhD are: Otorhinolaryngology, otology, otoneurology, laser and radiofrequency surgery in the ears, nose, throat and neck, oncosurgery of the larynx and neck, obstructive sleep apnea, rhinology, rhinosurgery, rhino- and pharyngometry, allergology, phoniatry, voice rehabilitation, hearing rehabilitation and hearing aids, health management, health care.

### Scientific work

Dr. Galen Dimitrov Shivarov, PhD published as an independent author a Monograph called 'Modern application of acoustic pharyngometry', Medical University"Prof.Paraskev Stoyanov" of Varna, 2020. ISBN 978-619-221-258-2

He is author and co-author of 14 scientific publications in Bulgarian and international journals, of which he is an independent author in 12, first author in one, and fourth author in 1, 6 abstracts and 6 presentations in national and international symposia and congresses.

One of the few candidates for habilitation with a utility model registration certificate (N1845/2014) from the Patent Office of the Republic of Bulgaria, co-authored with Dr. Milen Vrabevski.

Leader and member of project teams:

"Method of acoustic pharyngometry" was introduced for the first time in Bulgaria in Varna by Dr. Galen Shivarov, PhD and his colleagues as part of the screening studies for sleep disorders and received practical implementation in several Municipal Programs "Prevention of Sleep Apnea". They were successfully implemented in 2015, 2016 and 2017. They involved 1,100 residents of Varna Municipality and ended with great public interest and recognition.

He is fluent in German, English and Russian.

Member of the Bulgarian National Association of Otorhinolaryngology and Head and Neck Surgery

Contributions of Dr. Galen Dimitrov Shivarov, PhD:

Direction: Modern diagnosis and treatment of chronic rhinopathies

The main advantages of this thermotherapy are confirmed - safety, short duration, therapeutic effectiveness and lasting clinical effect. An original diagnostic-therapeutic algorithm is being developed for patients with these conditions (A1).

Direction: Modern diagnosis of obstructive sleep apnea and snoring in adult patients

The method of acoustic pharyngometry in patients with breathing problems during sleep was applied for the first time in Bulgaria within the framework of a prophylactic otorhinolaryngological program in the city of Varna. A number of significant statistically reliable correlations are identified between the values of the specific anthropometric and pharyngometric indicators in the specific pathological changes in the nasal canal, oral and pharyngeal cavity of the patients. The main advantages of the acoustic pharyngometry method are in the establishment of a precise three-dimensional functionally-morphological assessment of the oral and pharyngeal cavity, non-invasiveness, reproducibility, speed, cost-effectiveness, as well as the possibility of dynamic evaluation of the recordings in short time intervals. Anatomical correlations in the pharynx were found, in significant correlation with the severity of the disease.

Direction: Social epidemiology of laryngeal cancer

Two articles are devoted to the modern problems of the social epidemiology of laryngeal cancer. Incidence and mortality from laryngeal cancer are investigated between 2013 and 2015 in six regions of North-Eastern Bulgaria - Varna, Dobrich, Razgrad, Ruse, Silistra and Shumen. A review article discusses the incidence and mortality from cancer of the larynx in different countries, as well as the survival rate of patients with this socially significant disease. The risk factors, the role of human papilloma virus infection and modern prognostic markers in this disease are analyzed.

Two problem-oriented scientometric articles are devoted to the diagnosis of laryngeal cancer.

Direction: Diagnosis and treatment of rare benign otorhinolaryngological diseases

Two rare cases are presented: a 29-year-old patient with Thornwaldt's epipharyngeal cyst and a 69-year-old patient with a chondroma on the laryngeal surface of the epiglottis and obturation of the laryngeal entrance.

General assessment of the candidate's compliance with the mandatory conditions and the obligatory scientometric indicators and quantitative criteria according to the requirements of the Law and the Regulations for Implementation of Law on the Development of Academic Staff in the Republic of Bulgaria and academic reference of the MU-Varna No 54/06.02.2023.

A1. Dissertation for obtaining the educational and scientific degree "PhD of Medicine" - 50 points

C3. Habilitation paper - monograph - 100 points

D7. Publications and reports published in scientific journals, referenced and indexed in world-famous databases with scientific information - 180 points

D8. Publications and reports published in non-refereed peer-reviewed journals or published in edited collective volumes - 150 points

D10-D12. Citations - 100 points

The attached reference shows that Dr. Galen Dimitrov Shivarov, PhD has collected a total of 580 points and the requirements of each subgroup for a minimum number of points are also met.

After my familiarization with the following presented documents of Dr. Galen Dimitrov Shivarov, PhD, I consider that they comply and correspond to the National requirements of the Law and the Regulations for Implementation of Law on the Development of Academic Staff in the Republic of Bulgaria, and with the Regulation for the Development of Academic council of MU - Varna for employment in the academic position of associate professor at the Department of 'Neurosurgery and ENT Diseases' MU-Varna.

The before stated information gives me sufficient reason to propose Dr. Galen Dimitrov Shivarov, PhD to be elected for the academic position "Associate Professor" in professional domain 7.1. Medicine, field of higher education, professional field program "Otorhinolaryngology", in the Department of "Neurosurgery and ENT", MU-Varna.

Signature.....

Varna

Signature

10. April.2023

Assoc. Prof. Dr. Konstantin Petrov Georgiev PhD