To the Chairman of the scientific jury, appointed by order No. P-109-574 / 04.12.2020 of the Rector of Medical University-Varna

#### REVIEW

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**SUBJECT:** Competition for acquiring the academic position of "Associate Professor" in the field of higher education 7. Health and Sports, professional field 7.1 Medicine and scientific specialty "Surgery" for the needs of the Faculty of Medicine, Department of General and Operative Surgery of MU-Varna, promulgated in the State Gazette, issue 86 / 06.10.2020

In the competition, only the candidate Dr. Mihail Stefanov Tabakov, MD, has applied, currently practicing as a surgeon at the Clinic of General and Endoscopic Surgery of the University Hospital "St. Ivan Rilski", Sofia.

# 1. Biographical data and professional experience

Dr. Mihail Tabakov was born on June 28, 1978 in Sofia. In 2003 he graduated from MU-Sofia. He acquired a specialty in surgery in 2014. From 2004 to 2011 he was an intern, assistant and military physician at the Clinic of Emergency Surgery of the Military Medical Academy - Sofia. In 2011 he started working in the 4th surgical clinic of UMHAT "N.I. Pirogov", where he worked

until 2017, and successively held the positions of surgeon and assistant. In 2017 after successfully defending a dissertation, he obtained the educational and scientific degree "Doctor" in Surgery. Since March 2017, Dr. Tabakov has been working in the clinic of general and endoscopic surgery at the University Hospital "St. Ivan Rilski", Sofia. He has a qualification in health management acquired at the University of National and World Economy - Sofia, in 2015.

He has specialized in laparoscopic surgery in France, Germany, Turkey, Italy and the United Kingdom and holds a degree in laparoscopic surgery from the University of Strasbourg, France.

He speaks English, German and Russian.

He is a member of BMA, EHS and EDS

#### 2. Teaching activities

Dr. Tabakov's teaching activities include 138 hours of lectures at the Department of Emergency Medicine and 520 hours of teaching and methodological activities for the period 2017-2020. He gives lectures in emergency surgery to the residents in Emergency medicine with in the IV cycle of the lecture course of the specialty. He also annually participates in the practical exercises of students and specialists in "Emergency Medicine", "Emergency Surgery" and "Surgery". Throughout his career, Dr. Tabakov has conducted numerous modules in surgery from the specialization programs in Surgery, Emergency Medicine, Urology and and Traumatology. The extracurricular employment Orthopedics methodological activities of Dr. Tabakov are diverse and sufficiently busy. In addition, a reference was presented by the director of the University Hospital "St. Iv. Rilski", which confirms Dr. Mihail Tabakov as a leading specialist in his field.

#### 3. Scientific and research activities

In this competition Dr. Tabakov participates with a dissertation for the acquisition of ESD "Doctor" and 40 full-text publications and reports, divided as follows: 12 articles published in publications, referenced in world databases (Scopus and Web of Science), 27 articles and reports published in non-peer-reviewed journals with scientific review or published in edited collective volumes, included in the national reference list and one chapter of a collective monograph.

Outside the competition, Dr. Tabakov is the author and co-author of 26 additional publications and reports. According to the Google School platform, he has been cited 30 times with h-index -3 and i10 index - 1. 4 citations are presented for participation in the competition, all of which are in international journals, indexed in world databases. The total impact factor (IF) of the publications participating in the competition is 10,979. There are several impressive publications in some renowned international journals with a high impact factor such as: Colorectal diseases; Journal of Surgery; Medicine; International journal of coloretal diseases; European journal of emergency surgery.

In 2017, Dr. Mihail Stefanov Tabakov defended his dissertation on the topic: "STUDY OF THE POSSIBILITIES FOR TREATMENT OF VENTRAL HERNIATIONS WITH ENDOSCOPIC TECHNIQUES" and obtained the educational and scientific degree "Doctor" in Surgery. This paper describes the difference between the different ventral hernias, according to topographic location, size and complexity. An in-depth analysis of the effectiveness of the individual surgical methods and prosthetic materials was made, with an assessment and detailed understanding of the specific characteristics of each type of hernia. The dissertation shows through a comparative analysis between endoscopic techniques and open methods for ventral hernia repair, the indisputable advantages of minimally invasive techniques. It has been proven that the hospital stay is shorter and the rate of wound infections is lower compared to the open group. This scientific work is a useful practical guide for laparoscopic correction of ventral hernias, taking into account the importance of an individual approach to each patient, including accurate diagnosis, selection of optimal access, localization of all defects, selection of optimal technique for correction of defects and precise standardized surgical technique.

Publications in periodicals and collections of congresses: The publications of Dr. Mihail Tabakov, PhD. cover almost all sections of emergency and planned surgery. He is one of the pioneers in Bulgaria in the treatment of numerous surgical conditions with negative pressure. His research interests mainly include the application of laparoscopic surgical methods in the treatment of diseases of the colon, diaphragm and gastro-esophageal junction, abdominal wall and in emergency surgical conditions. The sections in which Dr. Tabakov presents publications can be summarized as follows:

# 1. Colorectal surgery (1, 5, 9, 11, 12, 25, 26, 29, 31, 32)

Much of the work in this field has been published in prestigious international surgical journals. A significant place is devoted to the increasing incidence of colorectal cancer. A systematic review and meta-analysis of the role of drainage after anterior resection of the rectum was performed. Despite the lack of difference in the frequency of anastomotic failures and the overall incidence of complications, three times higher mortality was found in the absence of drainage, which is in contrast to most published studies on this problem. A number of articles examine the place of laparoscopic surgery in obturating carcinoma of the right colon. They emphasize the difficulties such as limited working space, limited operative time due to the deteriorating general condition of the patient, the need for extensive experience in laparoscopy. The main conclusion that could be drawn is that the approach is feasible, but in strictly selected cases with a tendency for fewer complications, faster bowel movement resumption and shorter hospital stay with comparable frequency of anastomotic leaks. A review of the knowledge available so far in the world literature on total mesorectal excision in rectal cancer has been made. The frequency of local recurrences, survival and basic technical principles are analyzed. A laparoscopic surgical method for the treatment of benign and malignant diseases of the colon has been approved. Laparoscopic technique is becoming more widely used in the surgical treatment of colorectal cancer. This allows patients to benefit from the usual advantages of laparoscopic surgery over classical open surgery, with comparable long-term results in terms of cancer treatment. A study was made on the experience of the team of the surgery clinic of the University Hospital "St. Iv. Rilski" with radical laparoscopic resections of the rectum for rectal cancer for a period of 9 years and more than 150 completed laparoscopic interventions.

A comparative analysis of two techniques for the surgical treatment of hemorrhoids was performed: Ligasure hemorrhoidectomy and Stapler Hemorrhoidopexy on 124 patients with third- and fourth-degree hemorrhoids. The results of the pilot application in the country of recatoanal mucopexy for the treatment of high-grade hemorrhoidal disease have been reported.

# 2. Surgery of the anterior abdominal wall (8, 14, 23, 24, 27, 40)

The significance of anterior abdominal wall diseases is determined by their high frequency and impact on quality of life. The publications address various issues of anterior abdominal wall surgery, with an emphasis on endoscopic hernia repair techniques. The learning curve for the introduction of total extraperitoneal hernioplasty is analyzed, indicating the need for at least 50 operations to overcome it. All stages of intraperitoneal on-lay mesh repair (IPOM and IPOM +) of ventral hernias are studied and a comparative analysis of laparoscopic and conventional techniques is made. The details of laparoscopic ventral hernia repair in obese patients, as well as the quality of life after laparoscopic ventral hernioplasty have been studied. Special attention is paid to the cases with many defects in different areas of the abdominal wall and the possibilities for their endoscopic treatment are discussed. Some severe complications after inguinal hernioplasty have been analyzed, e.g. life-threatening bleeding from an intraoperatively unrecognized lower epigastric artery lesion.

### 3. Emergency surgery (1, 3, 8, 10, 12, 20, 21, 30, 33)

The works in this field are a direct reflection of the long-term work of Dr. Tabakov in the Clinic of Emergency Surgery of the Military Medical Academy - Sofia and the IV Surgical Clinic of the University Hospital "N. I. Pirogov" and affect almost all emergencies in surgery. In addition to the presented works in the field of military and trauma surgery and acute cholecystitis and appendicitis, other works study the application of laparoscopic surgical techniques for the treatment of perforated ulcer and small intestinal ileus.

The causes for conversion during laparoscopy for intestinal obstruction have also been studied. Several rare cases, that have been successfully treated laparoscopically, such as small intestinal intussusception due to melanoma metastases, as well as colloquial intussusception with a leading mesocolon lipoma, are also presented. The accumulated experience with minimally invasive techniques allows them to be applied successfully in more and more emergencies. This minimizes the detrimental effect of trauma on the abdominal wall, inevitably associated with any laparotomy, on the patient's recovery.

#### 4. Surgery of the diaphragm (15, 28)

A method for laparoscopic treatment of hiatal hernias was developed and introduced in the surgical practice of the surgery clinic of the University Hospital "St. Ivan Rilski". The results and complications were analyzed. The quality of life after laparoscopic cruroraphy of the diaphragm and Nissen fundoplication was monitored. A method for laparoscopic treatment of recurrent hiatal hernias was developed and introduced in the surgical practice of the surgery clinic of the University Hospital "St. Ivan Rilski". A method for minimally invasive surgical treatment of Morgani's hernia is described, as a video of the case is part of the prestigious virtual university of the IRCAD Institute, Strasbourg, France.

### 5. Trauma surgery (7, 13, 35)

A large number of publications are devoted to the blast and gunshot injuries, the behavior during mass casualties events and the differences in such incidents in military and civilian conditions. A report on the topic was presented at the European Congress on Trauma and Emergency Surgery in Valencia in 2018, the latter of which was published in Eur. J. Trauma Emerg. Surg. An original contribution on a national scale is the detailed research on the place of "damage control" surgery and "damage control" resuscitation in severe wartime and civilian injuries. In the field of "damage control" surgery, the work sheds light on the indications, tactics, technique, complications and long-term results. They emphasize that compliance with accurate indications and prompt application saves the lives of previously considered "inescapable" victims. Innovative for Bulgaria are the works dedicated to "damage control" resuscitation, which is an important, non-surgical approach to improving survival. They analyzed the basic principles and the role of fresh whole blood, the prognostic value of the different ratios of blood components, the effectiveness of recombinant coagulation factors and fibrinolysis inhibitors. The results have been promoted at a number of national and international congresses, and the systematic review on the ratio of blood components was awarded for the best report at the Balkan Military Medical Congress in Belgrade, 2017.

## 6. Open abdomen (37, 38)

An overview of the techniques for temporary abdominal closure is presented, focusing on the challenges facing the surgeon despite the accumulated significant experience, as well as critically reviewing the results of modern studies. A systematic review and meta-analysis of studies comparing techniques with and without negative pressure is presented. The analysis found significantly lower mortality in negative pressure techniques, as well as a short stay in an intensive care unit against the background of a comparable frequency of postoperative complications, which supports the safety of the methodology. Modern approaches to the open abdomen, and in particular the place of negative pressure, have been promoted at a number of congresses in Bulgaria, Serbia, Poland, Italy.

# 7. Negative pressure therapy in the surgical practice (5, 9, 30, 35)

The works in this field contribute to the scientific verification of the technique, leading to its more adequate application in modern surgical practice. For the first time in the country the technique for treatment of extensive wound defects has been applied, the results of which were presented in 2010. The effectiveness of negative pressure in deep surgical infection with fascial dehiscence, Fournier's gangrene, as wounds studied. wartime injuries and complex well in A thorough analysis of the use of intraluminal negative pressure in the treatment of insufficiency of low colorectal anastomoses was performed. The indications for application of the methodology are determined.

# 8. Case reports (2, 8, 12, 34, 40)

Although case reports have low scientific value, according to the evidence-based medicine, the applicant presents a number of unique and well-documented cases published in prestigious journals. Some of them were published for the first time in the world literature, which emphasizes the importance of the work of the team in which the candidate works. An example of this is the case of a patient with synchronous metastatic papillary thyroid carcinoma and 3<sup>rd</sup> stage non-Hodgkin's B-cell lymphoma, in whom complete remission was achieved and the patient is still alive 4 years after onset. Another case described small intestinal intussusception due to metastatic malignant melanoma operated by minimally invasive approach. A case of colo-colic intussusception with a leading mesocolic lipoma has also been

reported, successfully treated with laparoscopic extended right hemicolectomy. Also interesting is the case of an incarcerated inguinal hernia in a woman with a sliding left tube and ovary involved by leiomyoma, which required resection. Last but not least is the case of life-threatening retroperitoneal bleeding after open inguinal hernioplasty, in which classical damage control surgery was applied.

All cases are accompanied by a detailed analysis of the literature and are entirely didactic.

### 9. Crohn disease (18)

Although rare, Crohn's disease is of great social significance due to the fact that it mainly affects young people of working age, the need for long-term medication, frequent hospitalizations, surgical interventions and permanent disability in some cases. A modern, evidence-based review of the effectiveness of the various interventions has been made. The location of laparoscopic surgery, risk factors for postoperative complications and recurrences, as well as postoperative follow-up were also analyzed. The relationship between the type of performed ileo-colic anastomosis and postoperative anastomotic leaks after resections for terminal ileitis was studied.

## 10. New techniques in laparoscopic surgery (16, 17, 19, 39)

Methods for laparoscopic cholecystectomy and appendectomy through single incision have been developed and introduced in the surgical practice of the surgery clinic of the University Hospital "St. Ivan Rilski". An overview of the knowledge available so far in the world literature on single incision laparoscopic techniques is made and the available commercial and non-commercial sets are considered. The modern trends in the minimally invasive surgery are analyzed. The feasibility and limitations of the minimally invasive approach in liver resection surgery for benign and malignant diseases are critically reviewed, and the world experience is analyzed.

#### 4. CONCLUSION

The documentation and evidence presented in the competition cover the scientific and metric criteria for holding the academic position of "Associate

Professor", according to the Regulations for the development of the academic staff of MU - Varna and the legislation in the country, as it is reflected in the table:

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		Required	Available
Α	Index 1	50	50
В	Index 2	-	
С	Sum of indexes 2,3 and 4	100	121,6
D	Sum of indexes from 5 to 9	200	202,2
E	Sum of indexes from 10 to 12	50	60

In addition, Dr. Mihail Tabakov shows excellent skills in planned and emergency surgery. He masters all modern techniques for minimally invasive surgery and applies them successfully, which makes him an established modern surgeon. All this gives me a ground to give my positive vote and to recommend to the esteemed jury to choose Dr. Mihail Stefanov Tabakov, MD, PhD. for "Associate Professor" in the field of higher education 7. Healthcare and sports, Professional field 7.1. Medicine and the scientific specialty "Surgery".

26.01.2021

Member of the scientific jury :....

/проф. д-р Антоний Филипов д.м./