

Appendix № 1 to the  
order of FSBEI HE  
BSMU MOH Russia  
30.01.2019 № 41-a



**REGULATION**  
**on the organization and conduct of**  
**Russian National Student Surgery Olympiad with international participation**

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The present Regulation determines the organization and conduct of Russian Student Surgery Olympiad with international participation, its organizational and methodological support, eligibility criteria, and the procedure for determining the winners of the Olympiad.

The Regulation on conduct of International Student Surgery Olympiad is elaborated according to Civil Code of Russian Federation (art. 1057-1058 dated 26.01.1996 N 14 – FL (edited on 29.07.2018)); Order № 197 of November 9, 2018 “On approval of the list of Olympiads and other intellectual and creative competitions and events aimed at the development of intellectual and creative abilities, abilities to engage in physical culture and sports, interest in scientific, engineering, inventive, creative, physical culture and sports activities, as well as to encourage scientific knowledge, creative and sporting achievements, for the 2018/19 academic year”; Bylaw of Federal State Budgetary Educational Institution of Higher Education “Bashkir State Medical University” of the Ministry of Healthcare of the Russian Federation.

**1.GENERAL CONDITIONS OF THE OLYMPIAD**

- 1.1. The official name of the event: Russian National Student Surgery Olympiad with international participation (hereinafter referred as the Olympiad).
- 1.2. The present Regulation determines the purpose, goals, order, conditions of conduct of the Olympiad; rights and responsibilities of its participants; all documents necessary for organization and conduct of the Olympiad.
- 1.3. The Olympiad is organized by Ministry of Education of the Russian Federation, FSBEI HE BSMU MOH Russia (hereinafter referred as the Hosts).
- 1.4. The Olympiad is hosted by Federal State Budgetary Educational Institution of Higher Education “Bashkir State Medical University” of the Ministry of Healthcare of the Russian Federation within the university premises.
  - 1.5. The official languages of the Olympiad are Russian and English.
  - 1.6. The members of both the Organizing Committee and The Presidium are selected and confirmed by the Hosts.
  - 1.7. The Presidium includes:
    - Ministry of Healthcare of Republic of Bashkortostan;
    - Rector of FSBEI HE BSMU MOH Russia;
    - Vice Rector for Academic Affairs of FSBEI HE BSMU MOH Russia;
    - Vice Rector for Scientific Work of FSBEI HE BSMU MOH Russia;
    - Vice Rector for Educational and Social Work of FSBEI HE BSMU MOH Russia;
    - chief surgeons of Russia and Republic of Bashkortostan;
    - honorable guests.
  - 1.8. The Organizing Committee of the Olympiad can engage sponsors/partners. An organization or an individual who provides

informational and financial services based on the bilateral agreement with the Hosts of the Olympiad can become a sponsor (a partner).

1.9. The Organizing Committee of the Olympiad:

- develops the Regulation on conduct of the Olympiad;
- develops the Program of the Olympiad;
- determines the form of the Olympiad;
- determines the dates of the Olympiad;
- creates the contests of the Olympiad;
- elaborates criteria of the contests;
- selects members of the jury of the Olympiad;
- selects members of the appeal commission;
- makes an estimate of expenses;
- approves the list of winners of the Olympiad;
- organizes and conducts the award ceremony;
- organizes informational support for participants of the Olympiad;
- informs the participants of the Olympiad;
- forms the list of participants of the Olympiad.

1.10. Members of the Organizing Committee are selected from executives and representatives of the university by 01.02.2019.

1.11. The Olympiad is held with the support of the “Nizhnevolzhsky” Scientific Educational Medical Cluster.

1.12. The official address of the event: FSBEI HE BSMU MOH Russia, Unit №10, 450008, Ufa city, Teatralnaya str. 2/1.

1.13. The Supervisory Board of the Olympiad, according to the proposals of the Organizing Committee of the Olympiad, consists of independent experts monitoring the preparation and holding of the Olympiad. The members of the Supervisory Board are leading surgeons and scientists of the Republic of Bashkortostan and the Russian Federation, representatives of the administration of engaged universities.

## **2. PURPOSES AND GOALS OF THE OLYMPIAD**

2.1. The Olympiad is held in order to:

2.1.1. increase an interest of students to the future profession of a surgeon; reveal gifted and talented youth; form human resources;

2.1.2. promote professional consolidation; strengthen and develop professional connections and rapport between medical students and scientific supervisors.

2.2. The goals of the Olympiad:

2.2.1. fortifying student interest to surgery;

2.2.2. development of surgical skills in students;

2.2.3. development of communications between scientific schools;

2.2.4. support of promising future specialists.

## **3. THE OLYMPIAD IS A COMPOSING PART OF EDUCATIONAL PROCESS.**

3.1. Preparation to the competitions is organized by scientific societies of surgical departments of the University.

3.2. The participation in competitions is a result of their educational and research activities, directed on solving creative, research tasks in various fields of surgery.

3.3. The results of students' participation in the Olympiad are reflected in the annual university report on the educational and methodological activities.

3.4. The Olympiad is held as a model of accreditation of primary specialists.

#### **4. THE RULES FOR PARTICIPATION IN THE OLYMPIAD**

4.1. The participants of the Olympiad are: students of medical and pediatric faculties of 3-6 courses who are the proactive members of scientific student societies and actively involved in surgical competitions; a team should consist of 7-8 students. The Olympiad is an international one, teams of students from foreign medical schools (medical faculties) can take part in it.

4.2. There is one team and one leader from each university.

4.3. The participants of the Olympiad are obligated to:

4.1.1. get acquainted with eligibility criteria for participation in the Olympiad;

4.1.2. timely submit an application for participation in the Olympiad;

4.1.3. take part in the competitions according to the program of the Olympiad.

#### **5. PREPARATION FOR THE OLYMPIAD**

5.1. Preparation for the Olympiad is carried out in the manner and within the time limits established by the present Regulations.

5.2. Brief information on organization, conduct and requirements for participation in the Olympiad is stated in the information letter of the Olympiad.

5.2.1. The information letter of the Olympiad is communicated to the participants via:

- posting on the official website of FSBEI HE BSMU MOH Russia [www.bashgmu.ru](http://www.bashgmu.ru);

- distribution of the information letter to email addresses of Russian and foreign medical schools;

- distribution of the information letter to email addresses of Youth Scientific Society and student organizations of Russian and foreign medical schools.

5.3. In order to take part in the Olympiad one must fill in an application (Appendix № 1) for participation before **01.03.2019** for Russian medical universities and before **20.03.2019** for foreign medical schools, and email it to the Organizing Committee .

5.4. An official participant of the Olympiad is a team of medical university who registered on the official website of the Olympiad before the deadline and presented verified information.

5.5. The Organizing Committee creates the list of the Olympiad participants before 25.03.2019 based on the received applications.

5.6. After the list of the Olympiad participants has been formed, the official invitations are being distributed up to 31.03.2019.

Information for nonresident and foreign participants :

The Organizing Committee organizes a meeting of nonresident and foreign

participants, as well as accompanies them around the city and assists in resolving emerging issues.

Transport, accommodation and food expenses are paid by delegation party.

The Organizing Committee recommends the following addresses for possible accommodation;

Name	Address	Price
Hotel Arderia	Ufa, 3 General Gorbatov str., +7(347)2666657	from 1200
Hostel Ufa	Ufa, 51\2 Karla Marksa str., +7(347)2519855	from 600
Hostel Colibry	Ufa, 98\2a Revolutsionnaya str., +7(929)7532228	from 500
Hostel Stockholm	Ufa, 7 Revolutsionnaya,+7(987)5943585	from 500

For the team mentors :

Name	Address	Price
Hotel Volna	Ufa, 64\2 Zaki Validi str., +7(499)649-06-39	2190-4000 RUB
Hotel Agidel	Ufa, 16 Lenina str.	500-4000 RUB

## **6. THE OLYMPIAD POLICY**

Participants can start checking in one hour before the opening of the Olympiad (8 am). Participants sign registration sheet and receive the Olympiad Program.

6.1. The Olympiad is conducted according to the Program and includes two stages. Three teams with the highest points pass to the second stage.

6.2. The grand opening, participation in contests, the award ceremony, the closing ceremony are held within the framework of the Olympiad.

6.3. The opening ceremony of the Olympiad is supervised by the Presidium of the Olympiad.

6.4. The Chairman of the competition, the secretary, members of the jury selected by the Organizing Committee from the leading surgeons will be present on each Olympiad contest.

6.5. The Chairman of the competition supervises the process, solves organization issues, and together with the jury determines the winners and considers appeal, if necessary.

6.6. Members of the jury evaluate the performance of participants according to the competition criteria (Appendix № 2). Works are scored.

6.7. Each member of the jury fills in a check list of performance of competitive tasks. The final result is recorded in a summary sheet.

6.8. The responsibilities of the Secretary of a competition:

- maintains the competition protocol;
- checks in the participants of the competition (registration list);
- regulates the time of the competition;
- calculates points collected by each team, collects signatures of all members of the jury;

- after the completion of the competition the protocol is submitted to the Organizing Committee of the Olympiad.

6.9. In case of a situation when it is impossible to put up places (i.e. several teams will have an equal number of points), there will be an additional competition to identify the winner.

## **7.THE COMPLETION OF THE OLYMPIAD**

The results of the Olympiad are recorded in an act. The act is approved by the chairman of the Organizing Committee of the Olympiad. The summary sheet of points is attached to the act.

7.1. After completion of all competitions of the Olympiad, there will be the closing ceremony where the results are approved and the winners are awarded:

- the winner of the competition is a team with the highest score;
- there are three award-winning places;
- the winner of the Olympiad is a team that collected the most points in all competitions;
- winners will be awarded publicly during the official closing ceremony of the Olympiad;
- winners of the Olympiad will be awarded diplomas and memorable prizes;
- all participants of the Olympiad will get certificates of participants.

## **8.LIST OF DOCUMENTS FOR THE OLYMPIAD**

8.1. The list of documents for the Olympiad includes:

- the program of the Olympiad;
- the registration sheet for the Olympiad participants;
- the competition protocols;
- summary table for all competitions;
- protocols of awarding the winners;
- other documents and materials related to the Olympics.

8.2. At the end of the Olympiad, the Organizing Committee makes a summary report of the Olympiad and sends it to the Ministry of Health of the Russian Federation. The results of the Olympiad are covered in the media.

## Template of an application for participation

(Scan with signature should be sent)

1.	Full name of medical school	
2.	Name of department	
3.	Chair of department: full name, title	
4.	List of students: full name, group, faculty, team leader, phone number of a team leader	
5.	Mentor of a team: full name, title, phone number. Indicate a competition in which he/she prefers to be a jury.	
6.	Do you need a hotel accommodation? (yes/no)	
7.	Mail address of work/study place	
8.	Email address for correspondence	
9.	Link to social network page	
10.	Phone/fax number	
11.	Do you need an official invitation? (yea/no)	
12.	Consent to the publication of personal data on the website (select one) and signature: - only name and place of work; - name, place of work, and email address; - name, place of work, email address and phone number.	
13.	Date and time of arrival (mode of transportation)	
14.	Date and time of departure (mode of transportation)	

**Contest tasks  
of Russian National Student Surgery Olympiad with international  
participation**

The list of contests of the Olympiad:

1. Theoretical contest (test);
2. Anatomy contest;
3. Tracheal intubation + Cardiopulmonary resuscitation (CPR);
4. Coronary Artery Bypass Grafting (CABG);
5. Photo video contest;
6. Nephrectomy (Lapsim);
7. Intestinal reservoir;
8. Situational task;
9. LivePalp;
10. Laparoscopic appendectomy (using gloves);
11. Laparoscopic gastric wound closure (vet-lab);
12. **Second stage** (only three teams with the highest scores participate).  
Laparoscopic cholecystectomy.

Operations will be performed using porcine organs and pigs weighting 18-23 kg. Each team brings its own suture materials and instruments according to the requirements for each competition.

All surgical interventions on animals will be carried out in compliance with the rules of humane animal treatment in accordance with both the order № 755 of the Ministry of Health of the USSR of 12.08.1977 "On measures to further improve the organization of work using experimental animals" and order № 701 of 07.27.1978 "On introduction the additions to the order № 755 of the Ministry of Health of the USSR of August 12, 1977" as well as in accordance with the Helsinki Declaration of 2000.



## 1. THEORETICAL CONTEST

The competition is held in the format of testing. Participants need to choose one correct answer to each question presented on the screen.

**Contest organization:** Each participant (team leader) goes to the computer room and gets an answer form with 30 empty fields. The screen displays questions without an answer for all teams at the same time. Each question is read aloud by a representative of the Organizing Committee, and then 25 seconds are given for cogitation and writing an answer in the form. At the end of the competition, the forms will be collected by the organizers for evaluation by the jury members.

**Evaluation of the competition:** Each correct answer brings 0.5 point to a team. The maximum number of points - 15. With the number of points:

- 12 or more - 3 points are given to a team;
- from 9 to 11 – 1.5 points are given to a team;
- from 6 to 8 - 1 point is given to a team.

The final ranking of teams in the competition will be made by the number of points for correct answers.

## 2. ANATOMY CONTEST



*Anatomical simulator of 3D visualization (Virtumed)*

Two participants are to give correct answers for 10 cases with the use of anatomical simulator «YCom W».

Each right answer gives 1 point, incomplete answer - 0,5 point, wrong answer - 0 points.

Examples of cases:

1. A patient with a heavy bleeding from deep face wound (maxillary artery is injured) requires a ligature of external carotid artery. Point out a location where a ligature of external carotid artery should be performed (correct answer: external carotid artery is ligated 1 cm above the carotid bifurcation, above the level of superior thyroid artery).
2. A patient with a phlegmon of parotid-masticatory area underwent surgical drainage. During the operation, one of the branches of facial nerve was injured that lead to “risus sardonicus” in the patient. Show and name the injured nerve (correct answer: marginal mandibular branch of facial nerve).
3. A patient has an abscess in recto-uterine pouch following an appendectomy that was performed 5 days ago. The surgeon decided to puncture the abscess through the vaginal opening. Show the location where surgical puncture of recto-uterine pouch should be made (correct answer: posterior vaginal vault).

### 3. CARDIOPULMONARY RESUSCITATION

Two persons can take part in this competition. Evaluated skill: providing an emergency aid (first aid).

**Competition requirements:** providing basic cardiopulmonary resuscitation using automated external defibrillator to an injured person.

**Clinical case:** A 35-year old man got severely injured by an electric current during his work as an electrician. He is unconscious, breathless, in a state of clinical death.

During cardiopulmonary resuscitation defibrillator is going to appear as nonfunctioning. Participants have to make a right decision on time.

There is a special check-list for each participant where the following parameters are evaluated: determining vital signs, chest compression, artificial pulmonary ventilation e.t.c. The highest score for the competition is 14 points.

### 3a. Tracheal intubation

Task: to provide tracheal intubation on simulator.

Evaluation Criteria	Points
Time (no more than 25 seconds)	1
Correct intubation (the tube should run smoothly, without reaching the stomach, both lungs should be evenly ventilated)	0-1-2
Absence of oral cavity traumatization (determined by red signal on simulator and by decision of judges )	0-1-2
Total:	5

If intubation tube reaches the stomach, total points for competition is 0 points!

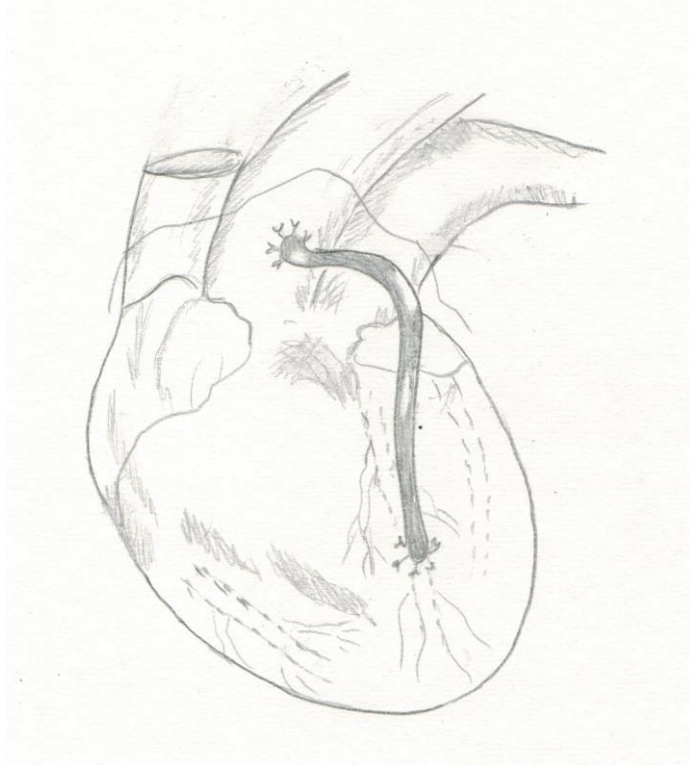
Participants, who will get 5 points for this competition and complete this task spending least amount of time, will get Diplomas of I, II and III grades. If all 5 teams will get 5 points for competition, the fastest of them will get Diplomas.

Number of people in each brigade: 2

### 4. CORONARY ARTERY BYPASS GRAFTING

**Competition requirements:** A team must perform coronary artery bypass grafting using autovenous transplant on anterior interventricular branch of left coronary artery. The operation is performed on porcine heart.

*Simulated clinical scenario:* surgical treatment of coronary heart disease affecting middle third of left anterior descending artery, coronary artery bypass grafting.



**Tasks:** To create coronary artery bypass between aorta and middle part on LAD using venous transplant.

Suture material: polypropylene thread 6/0 -7/0 – 1, polypropylene thread 8/0 – 1.  
 Participants must bring their own surgical instruments and suture material (it is necessary to have Cardiopunch 3 and 5 mm).

Evaluation criteria	Number of points
Suture esthetics (equal steps, directions of stiches, absence of crossings)	2 points – all the requirements are fulfilled; 1 points – different spaces between stiches, 0 points – different directions of stiches, irregular steps, inappropriate appearance of anastomosis.
Suture hermeticity	4 points – all the requirements are fulfilled (hermetic anastomosis, with diffuse leakage no more then 1/3 suture line), 3 points - anastomosis with diffuse perimeter leakage, 2 points – leakage of fluid from 1 hole, 1 point – leakage of fluid from 2 holes,

	0 points – incontinent anastomosis (fast fluid leakage, fluid leaking from 3 or more holes)
Absence of slagging and crossing of suture material in vessel lumen	2 points – no slagging, no crossing; 1 points – slagging or crossing of no more than 2 stitches; 0 points – more than 2 sutures are slagging
Absence of stenosis of anastomosis	2 points – sufficient area of anastomosis 1 point – insufficient area of anastomosis 0 points – complete stenosis of anastomosis
Absence of vessel intima sticking	1 point – absence of intima cutting 0 points – intima cutting
Theoretical background	(each team should answer 3 questions). Right answer brings 1 point; incomplete answer - 0,5 points; wrong answer - 0 points
Coordinated team work	0-1
Proper instruments usage	0-1
Time of completion of competition	2*
Total (maximum)	18

\*Teams who complete all the tasks in time get 2 points, the rest of the teams - 0 points.  
Time to complete the competition – 60 min.

Number of people in each brigade: 2-3.

If you have any questions and concerns regarding the competition, feel free to contact Ruslan Garifullin +7-927-083-44-25 or <https://vk.com/id34949199>.

## 5.PHOTO-VIDEO-COMPETITION

**Competition requirements:** Competition will be held as a quiz. After looking at a picture on a screen teams have to put down correct answer to a special sheet.

**Organization of competition:** Each team consisting of 2 people gets an answer sheet with 20 empty fields to fill in. During competition there will be 20 different endoscopic images of organs of abdominal and thoracic cavities on the screen. Each image will be accompanied by a question. After every question teams will have 30 sec for writing correct answer down. At the end of the competition the organizers will collect all the sheets from the teams for evaluation by jury members.

**Evaluation of results:** Every correct answer brings 0,5 point to a team. Maximum score for the competition is 15 points.

If a team gets  $\geq 9$  points in the competition total team score gets 5 more points;

If a team gets 6-8 points in the competition total team score gets 3 more points;

If a team gets 3-5 points in the competition total team score gets 2 more points;

Team ranking in the competition will depend on points received for correct answers.

Competition topics:

- Endoscopic view of abdominal cavity organs
- Endoscopic view of thoracic cavity organs.

If you have any questions and concerns regarding the competition, feel free to contact Ruslan Garifullin +7-927-083-44-25 or <https://vk.com/renatelli>.

## 6.LAPSIM NEPHRECTOMY

In this competition you are to perform nephrectomy with a LapSim virtual simulator.

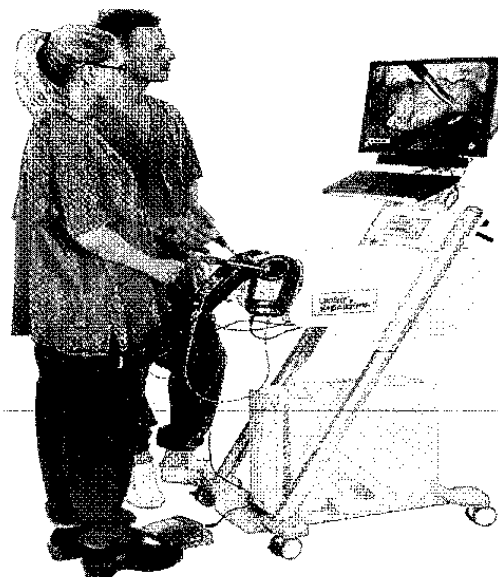
**Competition requirements:** Competition lasts for 7 minutes. Two persons can take part in it. There will be a 3D - kidney separated from pararenal adipose tissue on the screen.

**Main steps of the operation:**

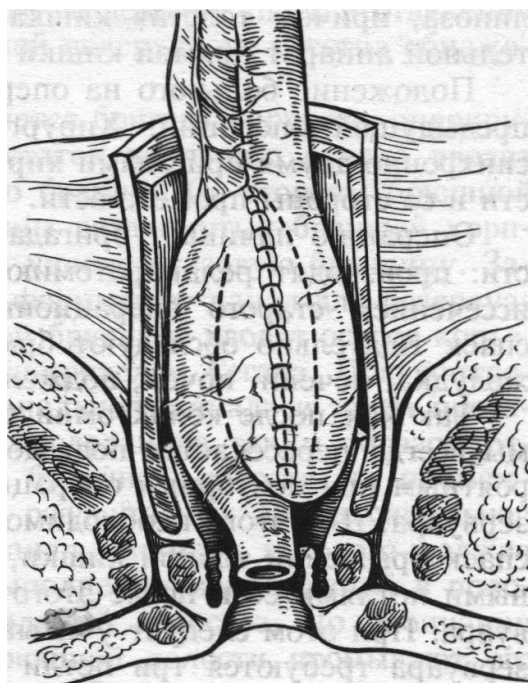
- 1) Step one: clip renal artery and dissect it.
- 2) Step two: clip renal and testicular veins and then dissect them.
- 3) Step three: clip and dissect ureter.

**Contest Criteria:** Elapsed time, path length of left/right appliance, angle of left/right appliance, left/right appliance out of sight, loss of clips, quality of ligation, blood loss and so on.

Contest Criteria are evaluated automatically by the operating system of the simulator.



## 7. S-POUCH OF THE SMALL INTESTINE



**Task:** a 40-year old patient suffering from ulcerative colitis underwent a subtotal colectomy 6 months ago. Create S- pouch from ileum.

**Mission:** A team needs to create a S-pouch from a 50-cm loop of the small intestine. The first step is to open the lumen of connected loops of the small intestine. Then the posterior wall of the reservoir is sutured. The side wall of the reservoir is sutured, the anterior wall of the reservoir is sutured. As a result of these steps the pouch takes its final form.

**Competition requirements:** The pouch must be formed using only manual suture without mechanical suturing devices. Seromuscular-submucosal suture (extra mucous suture) must be used.

**Number of people in an operating team:** 2-3 individuals (surgeon, assistant surgeon, nurse).

**Time to complete a task:** 60 minutes.

**Suture material:** polyglycolidi (Vicryl 3\0-4\0; piercing needle, ½; 20-26 mm). Personal suture material (2 threads) is used. It is necessary to have your own surgical instruments.

Evaluation criteria	Number of points
Suture hermeticity ( is tested by filling in the pouch with the water using syringe)	3 points – hermetic anastomosis 1 point – diffuse drop leaking 0 – streaming leaking from the suture line



Aesthetic qualities of stiches	3 points – equal distance between stiches, same direction of stiches, even tightening of stiches 1 point – different distance between stiches, same direction of stiches, uneven tightening of stiches 0 – different distance between stiches, different direction of stiches, uneven tightening of stiches
Visual absence of suture material in the lumen of the pouch	4 points – absence of suture material in intestinal lumen 2 points – suture material sticks out (no more than 2 sutures) 0 – suture material sticks out (more than 2 sutures)
Absence of the pouch narrowing	2 points – small narrowing of pouch 1 point – narrowing of pouch diameter on $1/3$ 0 – narrowing of pouch diameter on $1/2$
Team work	2 points – correct assistance, safe usage of instruments and needle, precise work with tissues, correct choice of instruments 0 – criteria are not met
Time of competition	30 minutes – 4 points 45 min – 2 points More than 60 min - 0
Theoretical background	4 points – 3 correct answers 2 points – 2 correct answers 1 point – 1 correct answer
Total (maximum)	22 points

## 8. SIMULATION CASE

**Task:** The clinical scenario will be simulated by an actor (medical resident). The participants are expected to gather patient's complaints, anamnesis of current illness, underline the main syndromes and symptoms of disease, make a preliminary diagnosis, develop a diagnostic work-up plan, prescribe effective treatment.

**Time to complete the competition:** 12 minutes (including 2 minutes to answer to a patient's questions).

**Number of participants:** 2.

Subject: – “Acute abdomen”, it is required to diagnose this condition and differentiate it from diseases with similar presentation, then prescribe treatment. There will be three clinical cases with various levels of difficulty. The number of received points will depend on level of difficulty. The most complicated case will bring 6 points, moderate difficulty case will bring 3 points, the easiest case will bring 0 points.

Participants receive a patient simulating a disease. The task of the team is to correctly collect the history, set a preliminary diagnosis, develop diagnostic work-up plan (if the assigned diagnostic methods are relevant for this clinical case, the results of the examination are given) and prescribe a detailed treatment plan (both conservative and surgical methods - the name and course of the operation). During the clinical case, the jury asks the necessary additional questions to the participants to assess general knowledge in the field of surgery (3 questions).

Preliminary diagnosis	<i>2 points</i> – correct diagnosis, complete differential diagnosis <i>1 point</i> – incorrect preliminary diagnosis, but the differential diagnosis is complete <i>0 points</i> - incorrect preliminary diagnosis, no differential diagnosis
Physician-patient interaction	<i>2 points</i> – trusting rapport with a patient is created, the complete anamnesis is collected, the main symptoms and syndromes are underlined <i>1 point</i> – trusting rapport with a

	<p>patient is created, the main symptoms and syndromes are underlined, but the collected anamnesis is not complete;</p> <p>trusting rapport with patient is created, the complete anamnesis is collected, but the main symptoms and syndromes are not underlined</p> <p><i>0 points</i> – trusting rapport with patient is not created, the collected anamnesis is not complete, the main symptoms and syndromes are not underlined</p>
Diagnostic work-up plan	<p><i>2 points</i> – diagnostic work-up plan is justified to rule out or confirm the diagnosis, provided results of diagnostic tests are interpreted correctly</p> <p><i>1 point</i> – diagnostic work-up plan is justified to rule out or confirm the diagnosis, provided results of diagnostic tests are interpreted incorrectly</p> <p><i>0 points</i> – diagnostic work-up plan is not justified to rule out or confirm the diagnosis, provided results of diagnostic tests are interpreted incorrectly</p>
Treatment plan	<p><i>2 points</i> - the optimal treatment plan is chosen, the course of treatment is explained in detail, there are no gross errors</p> <p><i>1 point</i> – the optimal treatment plan is chosen, but the course of treatment is not explained in detail</p> <p><i>0 points</i> – the incorrect treatment is prescribed</p>
Answers to questions of the jury	<p><i>5 points</i> – answers to all questions of the jury are detailed and correct, no factual errors or inaccuracies</p> <p><i>3 points</i> – answers are detailed and correct, but not to all questions of the jury; answers to all questions are incomplete but without gross</p>

	errors or inaccuracies <i>0 points</i> – no answer to any question of the jury; all answers are incomplete or with gross errors
<b>Total (maximum)</b>	<b>14 points</b>

If you have any questions and concerns regarding the competition, feel free to contact Ruslan Garifullin +7-927-083-44-25 or <https://vk.com/renatelli>.

## 9. CONTEST ON VIRTUAL SIMULATOR OF PALPATION “LivePalp”

The LivePalp simulator of the abdominal organs imitates the torso and accurately repeats all the patient's anatomical landmarks, which increases the degree of realism.

“LivePalp” can imitate the palpatory pattern of a number of internal organs in normal and pathological conditions (“acute abdomen”), depending on the chosen pathology and the task. Due to its electronic high-tech matrix, “LivePalp” allows to monitor the correctness of the assignment, to objectively evaluate abdominal examination skills. The simulator monitors and controls the correctness and consistency of palpation of the abdominal organs and whether all areas are palpated.

The program maintains a protocol of completeness of the participant’s examination, in particular, whether the abdominal organs were palpated.

Scenarios: The “LivePalp” simulator allows you to locate the programmed pain which is accompanied by an audible signal during palpation of the abdomen. For example, sound signals on palpation of the gallbladder, the appendix, or a tumor, etc. At the same time, additional pathological formations, in particular, tumors and cysts, can also be detected (positioning is required according to the scenario). One of the most important conditions for deep palpation of the abdomen is the knowledge of their projection on the anterior abdominal wall.

**Task:** The competition is held to assess practical skills - proper palpation of the anterior abdominal wall in the "acute abdomen". Participants need to make a diagnosis by palpation on the “LivePalp” simulator.

**The evaluation of the competition** is based on three criteria:

1. Superficial palpation of the anterior abdominal wall.
2. If necessary - deep palpation.
3. Palpation of organs.

One student participates in the competition.

**Time to complete the competition:** 10 minutes.

Example of task: there will be a brief description of a case of acute disease. For example: acute phlegmonous appendicitis.

FULL NAME of a patient - Petrov V.G.

Age: 68 years old.

Place of work: retired.

Who sent the patient: ambulance.

Upon admission to the emergency room the patient complains of a pain in the right lower quadrant – of a long duration, not associated with food intake and the breathing. Also, the patient endorses nausea, vomiting, dry mouth.

Anamnesis of current illness: Pain in the epigastric area of abdomen appeared at five o'clock in the morning. Then patient had nausea with single episode of vomiting, experienced chills and fever up to 37.5. Two hours later, the pain shifted to the right lower quadrant.

The participant is expected to: 1. perform an examination and palpation of the anterior abdominal wall (in this case, in the window of the screen you will see the abdominal cavity, on which the palpation areas and the degree of pressure on the abdominal wall will be displayed).

2. form a diagnostic hypothesis (on the form, which will be evaluated by the jury members).

3. develop diagnostic work-up plan (will be evaluated by the jury members)

4. elaborate treatment plan (will be evaluated by the jury members).

#### Competition Evaluation Criteria:

Competition Evaluation Criteria	Number of points	Notation
Time (not more than 10 minutes)	0-2 points	Recorded by judges
Palpation of the anterior abdominal wall on the simulator.		Calculated by the simulator program.

Correctness of diagnosis	0-4 -6 points	Scored by judges
Correctness of medical disposal	0-2-4 points	Scored by judges
Total:	points	

## 10. LAPAROSCOPIC APPENDECTOMY

**Task:** put 3 loops of Röder on the finger of a latex glove filled with water and dissect the finger between the ligatures. Participants will be offered a latex glove filled with water. The goal is to successively apply 3 ligatures to one of the fingers of the glove (chosen by the participants on their own), then dissect the finger between the ligatures. Removing a finger from a boxed simulator is not necessary.

**Time to complete the competition:** 15 minutes.

**Recommended instrument kit:** 1. Clip (dissector). 2. Knot pusher - for tightening the knot (for this purpose it is also acceptable to use the second clip/dissector) 3. Micro scissors.

**Evaluation criteria:**

1) Consistent anastomosis (assessed by the jury immediately after completing the assignment): failure of ligatures, lack of hermeticity - 0 points; drip leakage of water - 3 points; hermetic anastomosis - 5 points

2) Accuracy of manipulations (possession of manual skills in endoscopic surgery - the technique of instruments manipulation, the absence of unnecessary movements, etc.) - from 0 to 3 points;

3) Theoretical background (team members theoretical knowledge on laparoscopic surgery issues will be assessed, there will be 3 questions. The correct answer is 1 point; incomplete answer-0.5 point; wrong answer -0 point) - from 0 to 3

points.

The maximum number of points for the competition is 16. If a team member spends more time than allotted, the total amount of points for the competition is 0.

Teams collected the same number of points are evaluated according to the amount of time each participant spent on completing their task.

1 STAGE.

## **11. ENDOVIDEO SURGICAL COMPETITION - LAPAROSCOPIC STOMACH ULCER SUTURING**



It is required to perform a suture plication with the use of manual intracorporeal suturing technique on a pig ( a 2 cm wound will be inflicted by judges on anterior wall of stomach).  
Type of suture - double row ("through + serous-muscular").

The captain of the team and his assistant take part in this competition.

Competition Evaluation Criteria:

Competition Evaluation Criteria	Number of points
Suture consistency	5 points – consistent suture; 2 points - diffuse drip infiltration; 0 points - jet leakage from the suture line
Estheticism	4 points - equal spacing between sutures, same suture direction, uniform suture tightening; 3 points - equal spacing between sutures, different suture direction, uneven suture tightening; 1 point - different spacing between sutures, same suture direction, uneven suture tightening; 0 point- different spacing between sutures, different suture direction, uneven suture tightening.
Correct instrumental work (well coordinated work of the team, correct camera assistance, safety)	3 points - good assistance, safely use of instruments, nicety with tissues, correct tool advance, tool efficiency  2 points - minor irregularities in the manipulation of instruments and camera; 1 point - significant violations when working with tools and the camera, tissue injury;  0 point - Noncompliance criteria. Rough safety violation.
Time	20 min - 5 points; 25 min - 3 points; 30 min - 2 points;  More than 35 min - 0 points.
Total maximum	17 points



**2 STAGE. 12. Endo video surgery competition – laparoscopic cholecystectomy from the cervix**

Operative procedure includes 5 sequential stages:

1. Setting of trocars: one – in the area of umbilicus, 2 trocars in the areas of hypochondrium, one in the mesogastric area (all will be set by the members of jury).
2. After the capture of the gall bladder in the bottom area and in the cervix area. Gall bladder duct and bladder artery could be found.
3. The duct and artery are detached (**Calot's Triangle**) by the dissection of peritoneum leaves and cellular tissue.
4. The gall bladder artery and duct are clipped, the gall bladder is detached from the bed.
5. The bladder bed is shortened and the gall bladder is extirpated from the peritoneum.

Criteria	Number of points
Fulfilling of the stages of the operation	Sequential performing of the stages – 5 point Nonexecution of 1 stage – 3 points Nonexecution of 2 stages – 1 point Nonexecution of 3 stages – 0 points
Absence of thermal/mechanical damage of liver and surrounding tissues and organs	No damages of organs and tissues – 5 points Minor damages – 4 points Damages of organs and tissues, not requiring additory actions – 3 points Protuberant thermal damages – 2 point Protuberant thermal damages, requiring additory actions – 1 point Crude damages, requiring third party helping measures or termination of operation – 0 points
Absence of sliding of the clamps	Absence of sliding of the clamps – 4 points Sliding of 1 clamp – 2 points Sliding of 2 clamps – 1 point Sliding of 3 clamps – 0 point
Team work (operators conflict)	Coordinated team, no reprimand – 3 points Work with singular comments – 2 points Operators conflict – 1 point Conflict with members of jury – 0 point

Aesthetic qualities	Clean work with instruments – 2 points Singular remarks – 1 point “Dirty work” of the brigade – 0 point
Instrumental work (instruments conflict)	Seamless work with instruments – 3 points Singular blots – 1 point Conflict of instruments – 0 point
Theoretical background (3 questions to each team)	Each correct answer – 1 point Not complete answer – 0.5 point Wrong answer – 0 point
Time	30 min – 5 points 35 min – 4 points 40 min – 3 points 45 min – 2 points 50 min – 1 point Excess time or stop of operation – 0 point
Total	28 points

## Program of All-Russian Student Surgical Olympiad with International participation

25.04.2019-26.04.2019

25.04.2019			
№	Time	Event	Place
1	8.00-9.00	Team registration	Building N 10 of BSMU, hole (Teatralnaya Str. 2/1)
2	9.00-9.45	Opening of Olympiad. Greetings. Teams presentation.	Building N10 of BSMU, Aula (Teatralnaya Str. 2/1)
3	10.00-10.40	Theoretical contest (test) ( 1) (head of team)	Dentistry polyclinic, N № 6 (Zaki Validi Str. 45)
4	10.00-11.30	Anatomical competition (clinical cases) (2)	Building N 5 of BSMU, (Zaki Validi Str. 47)
5	10.00-11.30	Tracheal intubation + Cardiopulmonary resuscitation (CPR) (2-3)	Building N 10 of BSMU, hole (Teatralnaya Str. 2/1)
6	11.00-12.50	Coronary artery bypass grafting (2)	Dentistry polyclinic, N № 6 (Zaki Validi Str. 45)
7	11.45-12.45	Photo and video competition (1-2)	Building N10 BSMU, Small Holle (Teatralnaya Str. 2/1)
8	13.00-14.00	Break (Lunch)	Canteen of BSMU
9	14.00-15.30	Nephrectomy (Lapsim) (1)	Dentistry polyclinic, N № 6 (Zaki Validi Str. 45)
10	14.00-16.00	Intestinal reservoir (2-3)	Dentistry polyclinic, N № 6 (Zaki Validi Str. 45)
11	14.00-17.00	Clinical cases (2)	Dentistry polyclinic, N № 6 (Zaki Validi Str. 45)
12	16.10-18.00	Laparoscopic appendectomy (2)	Dentistry polyclinic, N № 6 (Zaki Validi Str. 45)
13	16.10-18.00	Contest on virtual simulator of palpation "LivePalp" (1)	Dentistry polyclinic, N № 6 (Zaki Validi Str. 45)

14	19.00	Dinner, Social events	Canteen of BSMU
26.04.2019			
1	10.00-12.00	Laparoscopic gastric wound closure (2-3)	Karl Marx Str. 50
II STAGE			
10	12.00-13.30	Laparoscopic cholecystectomy (2-3)	Karl Marx Str. 50
11	17.00	Results.Awarding. Closing of Olympiad	Building N10 of BSMU, Aula (Teatralnaya Str. 2/1)