

**Federal State Budgetary Educational Institution  
of Higher Education  
« N. P. Ogarev's National Research Mordovia State University»,  
Medical Institute**

**Regional non-governmental organization  
«Association of Young Medics & Scientists of the Republic of Mordovia»**



АССОЦИАЦИЯ МОЛОДЫХ УЧЕНЫХ-МЕДИКОВ  
РЕСПУБЛИКИ МОРДОВИЯ

**The all-Russian Olympiad  
with international participation  
in Normal and Pathological Physiology  
«Secrets of life»  
in the format of the TV show «The brainiest»**

**Saransk 2022**

*The all-Russian Olympiad with international participation in Normal and Pathological physiology «Secrets of Life» in the format of the TV show «The brainiest»* (hereinafter referred to as *The Olympiad*) is an intellectual team competition between 4th - 5th year students of higher medical education from the Russian federation and neighboring countries in the format of a popular TV show, including Russian-speaking and English-speaking sections.

***Dates of The Olympiad: November 14-15th, 2022;***

***Dates for accepting applications for participation: August 1st – October 15th, 2022.***

The Olympiad will be held ***in off-line format***. The venue is N. P. Ogarev Mordovia State University, Saransk, the Republic of Mordovia, the Russian Federation. In case of unforeseen circumstances, a ***remote format*** of the event is provided. The Olympiad will be held entirely in one format, a mixed format is not provided.

### **The topics of The Olympiad**

The main topics of The Olympiad are «*Normal physiology*», «*Pathological physiology*». The goal of The Olympiad is to demonstrate the importance of physiology, one of the key basic medical disciplines, and to provide participants an opportunity to show their knowledge in this field and the ability to creatively apply them.

### **Requirements for the participants of The Olympiad**

The ***4th - 5th year students of higher medical education*** are invited to participate. Participants from one university should form ***team three people team*** and choose ***a team captain***. The team captain ***must apply the Google form*** (<https://forms.gle/rWdSNpb7gSmuogNM7> - for Russian-speaking section, <https://forms.gle/Stx6sjPwtNoavYS59> - for English-speaking section) for the team's participation in The Olympiad. In the moment of registration the participants must independently formulate and indicate in the registration form ***the personal topic of the team*** on normal and pathological physiology for *Stage 3* (see "The protocol of the Olympiad ", "Stage 3"). The number of participants in each section is limited to 10 teams.

### **The protocol of The Olympiad**

The Olympiad includes **two sections** - Russian-speaking and English-speaking. Each section uses its own linguistic and cultural characteristics (respectively, the Russian language and Russian-speaking culture, English and English-speaking culture) in the preparation of materials and in communication with participants throughout the event. Sections of The Olympiad will be separated.

At the stage of planning the Olympiad, it was decided to use both the state language (Russian) and international language (English) for communication purposes. This decision made it possible to expand the scope of the event and invite citizens of other states who have chosen universities of the Russian Federation for medical education and study in them in English to participate. The Organizing Committee of the Olympiad considers this step as a contribution to the development of international cooperation in the field of medicine and to the popularization of higher medical education in the Russian Federation.

Registered teams, if the number of participants in one or both sections exceeds 10 teams, pass *the qualifying stage in on-line format* using Internet communication technologies. The qualifying stage for the Russian-speaking and English-speaking sections will be separated. The results of the qualifying stage will define 10 teams for participation in each of the sections of The Olympiad. If the number of participants in one or both sections is up to 10 teams inclusive, the qualifying stage will not be held.

The Olympiad includes three stages.

#### Stage 1 «Quiz».

The moderator voices the rules of the stage.

Participating teams are invited to answer 15 questions on normal and pathological physiology. Questions are displayed on the screen and read out by the moderator.. Each question has 4 possible answers, one of which is correct. The response time is 15 seconds (the timer is displayed on the screen). Each correct answer is rewarded with 1 point.

After every 5 questions, a tournament table is displayed on the screen, reflecting the current results of the participating teams.

#### The intermediate stage «Decryptor».

Before the 2nd and 3rd stages of the Olympiad, the drawing lots is held to determine the order of participation of participating teams in these stages. The drawing lots is a short task for erudition and the ability to think logically.

The moderator voices the rules of the drawing lots.

A digital code is displayed on the screen, replacing the hidden word. The hidden word is directly related to normal and pathological physiology. Each digit of the code replaces one letter of the hidden word. The participating teams are provided with a key to the code, which is a T9 keyboard, where each digit corresponds to several letters (the key differs in the Russian and English sections!). The participating teams must decrypt the hidden word.

<b>1</b> -	<b>2</b> А Б В Г	<b>3</b> Д Е Ж З
<b>4</b> И Й К Л	<b>5</b> М Н О П	<b>6</b> Р С Т У
<b>7</b> Ф Х Ц Ч	<b>8</b> Ш Щ Ъ Ы	<b>9</b> Ь Э Ю Я
<b>*</b> -	<b>0</b> -	<b>#</b> -

(the key for Russian-speaking section)

<b>1</b> -	<b>2</b> A B C	<b>3</b> D E F
<b>4</b> G H I	<b>5</b> J K L	<b>6</b> M N O
<b>7</b> P Q R S	<b>8</b> T U V	<b>9</b> W X Y Z
<b>*</b> -	<b>0</b> -	<b>#</b> -

(the key for English-speaking section)

The speed of decryption determines the order of participation of the participating teams in the stage following the drawing lots: the participating team that decrypted the hidden word first participates in the next stage first, and, accordingly, the participating team that decrypted the hidden word last participates in the next stage last.

### Stage 2 «Blitz».

*The drawing lots* is held.

The moderator voices the rules of the stage.

Participating teams are invited to choose one of 10 topics of normal and pathological physiology. The selected topic is subsequently unavailable to other participating teams. After

selecting a topic, the participating team is invited to answer the maximum number (up to 15) questions on the selected topic within 1 minute. Questions are displayed on the screen and read out by the moderator sequentially – the transition to the next question occurs if the participating team voices its answer option or informs about the desire to skip this question ("Pass!"). The participating team has the right to voice only ONE answer option, which is immediately evaluated as correct or incorrect. Each correct answer is rewarded with 1 point.

The stage has 2 rounds, each participating team has the opportunity to choose 2 topics in total (1 topic – 1 round). After the completion of each round, the tournament table is displayed on the screen, reflecting the current results of the participating teams.

### Stage 3 «Hometask».

In the moment of registration the participating teams must independently formulate and indicate in the registration form the personal topic of the team on normal and pathological physiology for Stage 3.

The personal topic of the team is freely formulated by the participating team and can be anything meets the only criterion - a direct relationship to normal or pathological physiology. Thus, examples of the personal topics of the teams are "Normal physiology of the cardiovascular system", "Pathological physiology of the kidneys", "Physiology of muscle fiber", "Mechanism of the end-plate potential", "Contribution to the physiology of I. P. Pavlov", "Nobel Laureates in Physiology and Medicine". Despite the fact of the free formulation of the topic, the Organizing Committee invites participants to take into account a number of factors: 1) a broad formulation requires in-depth study of a broader topic, and versa – it is easier to prepare for a narrowly formulated topic; 2) a well-known topic is usually better studied, materials on it are more standardized and available to students - however, including your rivals, while a narrowly specialized topic is likely to be known only you, but it is more difficult to study such a topic on your own at a sufficient level. Thus, according to the Organizing Committee, a balanced topic in which breadth and specialization will be average will be optimal. The Organizing Committee guarantees that the questions on the personal topics of the teams will semantically correspond to the topics, wishes the participants success in choosing the topic and expects creative solutions.

*The drawing lots is held.*

The moderator voices the rules of the stage and the personal topics and the colors of the participating teams.

The screen displays a table divided into 100 sectors, numbered from 1 to 100. Each sector contains 1 question; in total, the table contains 90 questions on the personal topics of the participating teams (9 questions for each team) and 10 questions on the random topics of normal and pathological physiology. Each sector is color-coded: sectors with questions on the personal

topics of the participating teams are marked with colors of the participating teams, sectors with questions on the random topics are white. The participating teams can see this table within 15 seconds. Subsequently, the participating teams can see the modified table, devoid of color coding.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

(example of the color-coded table)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

(example of the non-color-coded table)

Командам-участникам предлагается выбрать один из секторов таблицы. Выбранный сектор впоследствии недоступен другим командам-участникам. После выбора сектора команде-участнику предлагается ответить на вопрос по теме данного сектора. Вопросы выводятся на экран и зачитываются ведущим. Команда-участник должна самостоятельно сформулировать и озвучить ОДИН вариант ответа. Время на ответ – 15 секунд (таймер

выводится на экран). Каждый правильный ответ вознаграждается в зависимости от темы сектора: персональная тема своей команды – 2 балла, персональная тема чужой команды – 3 балла, случайная тема – 1 балл.

Этап проходит в 5 кругов, каждая команда имеет возможность суммарно выбрать 5 секторов и ответить на 5 вопросов. После завершения каждого круга на экран выводится турнирная таблица, отражающая текущие результаты команд-участников. В случае, если победитель не выявлен, проводятся дополнительные круги (до 5).

Participating teams are invited to choose one of the sectors of the table. The selected sector is subsequently unavailable to other participating teams. After selecting a sector, the participating team is invited to answer a question on the topic of this sector. Questions are displayed on the screen and read out by the moderator. The participating team must independently formulate and voice ONE answer option. The response time is 15 seconds (the timer is displayed on the screen). Each correct answer is rewarded depending on the topic of the sector: the personal topic of your team – 2 points, the personal topic of rival team – 3 points, the random topic – 1 point.

The stage has 5 rounds, each team has the opportunity to choose 5 sectors in total and answer 5 questions. After the completion of each round, the tournament table is displayed on the screen, reflecting the current results of the participating teams. If the winner is not revealed, additional rounds (up to 5) are held.

The performances of the participants at each stage are evaluated in points, which together form the rating of the teams, determining their place in the standings of the stages. The rating of each stage is taken into account in the final standings.

The winner of The Olympiad will be the participating team will take first place in the final standings. The laureates of The Olympiad will be the participating teams that will take second and third places in the final standings. The winners and laureates of each of the stages of The Olympiad will be awarded separately with diplomas, which will be determined similarly to the place in the standings of each of the stages.

### **Additional information and feedback**

Information about the primary source of The Olympiad format can be found at the link:  
[The Cleverest - Wikipedia](#)

Information concerning the direct organization of the event (including the exact time, the necessary means of communication, etc.) will be provided in advance to the participating teams upon completion of registration. The Organizing Committee of The Olympiad reserves the right to make changes to the Regulations of The Olympiad, while assuming the obligation to inform about it in advance.

Up-to-date information on the event will be available on the official website of the Ogarev Mordovian State University (<https://mrsu.ru/>) and in the Vkontakte community of the regional non-governmental organization «Association of Young Medics&Scientists of the Republic of Mordovia» (<https://vk.com/amumrm>).

If you have questions or suggestions, you can contact the Organizing Committee of the Olympiad by e-mail ([amumrm13@yandex.ru](mailto:amumrm13@yandex.ru)) or What's App messenger (+7 987 690-32-16).