

## IRIS 2020: moving to the fully virtual space: IRIS Kyrgyzstan 2020 digital – the first full on-line IRIS course

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The IRIS Kyrgyzstan 2020 represents further important step in moving IRIS into the virtual space (1, 2). The first full on-line course Kyrgyzstan 2020 digital was held on October 23-27, 2020, organized by the Center for Scientific Research and Development of Education, SRI of Heart Surgery and Organ Transplantation, National Center of Cardiology and Internal Medicine, and International School of Medicine, Bishkek, Kyrgyzstan, under the patronage of Heart Vessels and Transplantation journal, under the leadership of Gulmira Kudaiberdieva.

The researchers from the Central Asia are increasingly interested in running IRIS courses as well as in participating at them. The first IRIS course in the Central Asia was held in 2015 in Kyrgyzstan, and the IRIS 2020 Kyrgyzstan was already the 3rd one in Kyrgyzstan and the 6th in the Central Asia. Close and intensive collaboration between Kyrgyzstan and Kazakhstan resulted in an impressive number of trainees and of national faculty (the total number of participants from the Central Asia reached 76, including 30 participants from Kyrgyzstan and 46 from Kazakhstan). The locations of IRIS courses in the Central Asia are presented in Table 1.

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**Table 1. The location of the IRIS courses in Kyrgyzstan and Kazakhstan**

Year	Location	Country
2015	Cholpon-Ata, Issyk-Kul,	Kyrgyzstan
2016	Merke, Taraz,	Kazakhstan
2017	NurSultan (former Astana)	Kazakhstan
2017	Semey	Kazakhstan
2018	Bayet, Issyk-Kul	Kyrgyzstan
2020	Bishkek	Kyrgyzstan

This year IRIS was originally planned for June, but because of the COVID-19 pandemics it had to be postponed to October 2020 (2). That time was utilized for a perfect preparation of the on-line arrangement.

#### Participants:

From Kazakhstan – different cities (Aktobe, Shimkent) took the opportunity – Aktobe a special interest – originally also interested in organizing IRIS – postponed to the year 2021: Shimkent - Moldir Baibolova, Kymbat Trusheva from International Kazakh-Turkish University; Aktobe - Akmaral Baspakova, Anara Abitova, Zhanylsyn Gayisieva from Marat Ospanov West Kazakhstan Medical University,

From Bishkek, Kyrgyzstan - Azalbek Turgunov, Dinara Toktosunova, Zairbek Syrgaev from SRI of Heart Surgery and Organ Transplantation; Aliia Bazhanova, Nurgul Rysalieva and Chinara Ismailova from International School of Medicine, Shirin Talapbek-kyzy from Kyrgyz State Medical Academy.

#### Faculty and organizers

Gulmira Kudaiberdieva (Kyrgyzstan), Ljuba Bacharova (Slovakia), Uliana Pidvalna (Ukraine), Jonathan Lipton (Australia), Eric Eisenstein (USA), Damirbek Abibillaev (Kyrgyzstan), Pavel Tiumkin (Kyrgyzstan), Taalalbek Kudaiberdiev (Kyrgyzstan), Mykhaylo Sorokivskyy (Ukraine), Samuel Bell (USA), Stalbek Akhunbaev (Kyrgyzstan), Jamal Ashimov (Kyrgyzstan), Akpay Sarybaev (Kyrgyzstan).

The online course and workshops were conducted by Ljuba Bacharova, Eric Eisenstein, Jonathan Lipton, Uliana Pidvalna and Gulmira Kudaiberdieva with technical support of Pavel Tiumkin and Alexei Semenov. Participants of IRIS course also had opportunity to moderate workshops.

At the beginning of each workshop faculty made short presentation:

- Workshop 1: Jonathan Lipton - Introduction to research proposal;
- Workshop 2: Gulmira Kudaiberdieva - Research design and methods I: Study population and outcomes;
- Workshop 3: Uliana Pidvalna - Research design and methods II: Data collection and analysis;
- Workshop 4: Eric Eisenstein - Research administration.

#### Projects

Participants were divided into international teams: half and half Kyrgyzstan / Kazakhstan, interdisciplinary teams: cardiology, cardiovascular surgery, epidemiology, public health, statisticians, biophysics, neurology, oncology, primary care, family medicine. The topics of two reflected the current situation – COVID-19:

- **Group CNEC:** Impact of altitude on cognitive functions of patients after coronary artery bypass graft (CABG) (*Azatbek Turgunov, Kymbat Trusheva, Anara Abitova, Nurgul Rysalieva*).
- **Group MoZaChinAk:** The association of consumption of selenium containing products with the COVID-19 infection: A survey study. (*Zairbek Syrgaev, Moldir Baibolova, Akmaral Baspakova, Chinara Ismailova*).
- **Group Immunity:** Inappropriate use of antibiotics in patients with mild COVID-19. (*Shirin Talapbek kyzy, Dinara Toktosunova, Zhanylsyn Gayisieva*).

#### Time difference

The online course was also outstanding because of time differences when faculty members and participants were connecting from work places and home as well. Eric and Jonathan participated even early morning or late night (Australia and USA), while 3-4 - hour difference for Europe and Kyrgyzstan, Kazakhstan was not so discernible – all groups worked hard. The most applauds must also go to Pavel and Alexei who had to be online almost 15 hours per day to provide online support. We think that we managed to overcome time differences.

#### Feedback from participants and faculty

##### Shirin Talapbek'kyzy

*This October 2020, I had the privilege of participating International Research Interdisciplinary School (IRIS 2020). I planned to take part for two years and only this year I was lucky to submit documents on time. However, the COVID-19 pandemic ruined all plans and I will not hide my disappointment when I learned that the training will take place online. Of course, I wanted it to happen on the shore of the Issyk-Kul, far from work and home, when you could concentrate on work. But...*

*The first day I was full of doubts: online platform, new people,*

and I'm freshman in research, really didn't know what to expect. However, the organizers did their best so that we could quickly find a common language and the atmosphere was very comfortable. But, the real fun began when, after a short lecture, we were divided into teams. Thus, my team included a cardiac surgeon, a statist from Kazakhstan and me, a family doctor. It seemed that we had nothing in common and we would not be able to make a common project. How deeply I was mistaken...

The most what I enjoyed at IRIS - systematized and accessible presentation of information, emphasis on independent performance of tasks, maximum accent on 100% involvement of each team member and faculty from different parts of world, who shared their invaluable experience. With the help of international mentors (faculty) and with interdisciplinary team we could look at our project from a different perspective. And it was great to watch how faculty were giving shape to our vague ideas. From the outside it seemed like a sculptor scrupulously carving out figure, focusing more and more on details, thanks to which we were able to prepare a completely feasible project.

As a beginner, I would advise to all who are at first step of their research career to take the IRIS course. It is incredible opportunity to meet like-minded people from all over the world who are curious about research! It doesn't matter who you are, where are you from and which specialty you are, if you really love doing research, then language of science is the same! Come and attend IRIS!!!

#### **Uliana Pidvalna**

International Research Interdisciplinary School (IRIS) is not the typical school in a building with a permanent location, home task and grades. It appears in different parts of the world where self-motivated and thirsty for knowledge people are collected. This especially challenging year changed the format of training, making them online, but did not impact on the quality of the educational process.

How does it look? Five days of intensive training to learn how to conduct a good study and gain your goal at the end of the experimental or observational study. At first, it is hard to create a great project, build a hypothesis, to get deep into the pros and cons regarding topicality of the study, assess the possible obstacles and try to predict or fix them. Details matter. IRIS teaches it.

October 2020. 12 participants from 2 Asia countries (Kazakhstan and Kyrgyzstan) and 6 faculty members from all over the world (USA, Slovakia, Ukraine, Turkey, Kyrgyzstan, Australia) gathered together to make a great commitment together. Nothing is impossible if you meet the right people.

#### **Nurgul Rysaliev**

Dear organizers of IRIS!

Thank you very much for such an excellent school!

I wanted to enlarge my knowledge on modern methods of research development, and manuscript preparation. Participating in IRIS

considerably helped me with this and even much more. Everyday workshops with precise discussion of each part of Research were very useful and well organized. Every part of manuscript preparation was systematized. I highly recommend to participate in this School everyone who deals with research, especially to postgraduate students before conducting their study.

#### **Kymbat Trusheva**

I am pleased that I took part in IRIS 2020. I would like to thank the organizers and mentors for new knowledge and skills. During a short period of study, I mastered a lot of useful information. I have clearly learned to make up the skeleton of the study. And also, working and discussing research in a team is very interesting. After all, a team of smart and creative people charged you with positive energy.

#### **Chinara Ismailova**

I would like to share my opinion (impression) about the training.

For me it was very useful and interesting. Although I knew something of course about how to conduct a research work, my knowledge was chaotic. Now it became absolutely clear and I have to recognize that if to follow the instructions which we got during the workshop, it would be much more easier to arrange the scientific research. I liked the way of carrying out the training — that was a practical work on a supposed project which can be realized. The material given in presentations was perfectly systematized and structured that helped us to understand it clearly. I liked the atmosphere which was very favorable and friendly.

I think that such type of training can be very useful for young scientists both in post-graduate and just making any investigations. I am even going to propose to our PhD department to send all their students to attend this training.

The special attention must be paid to speakers and faculty members who skillfully oriented us towards right decisions and right directions during discussions.

Finalizing my view I would like to express my great thanks and gratitude to organizers of this training.

Best regards

#### **Aliiya Bazhanova**

Thank you for organizing this school. A very intensive and interesting work began from the first day. Our group was active, creative, it was very useful to work and share experience. I would also like to acknowledge the work of the tutors, who have guided and advised us from the very beginning. I received a lot of useful information. The experts are great professionals who were ready to answer all questions.

It is a pity that due to the current situation with the spread of coronavirus infection, it was not possible to work in conditions of separation from the main job. It was difficult to combine IRIS work and day-to-day activities.

I wish you further development and achievement of new goals!

**Moldir Baibolova**

Personally, I really liked the school , I learned a lot, especially about the selection of the research method (since there were difficulties). I became so attached, so the next day I missed it

already. It`s a pity that it was not in Bishkek, because of the pandemic. But nothing, and online format was great too. I will advise everyone. And I want to express my deep gratitude to all the organizers, especially Gulmira. Good luck and prosperity to all. Thank you.



Figure 1. Workshop - discussions of projects

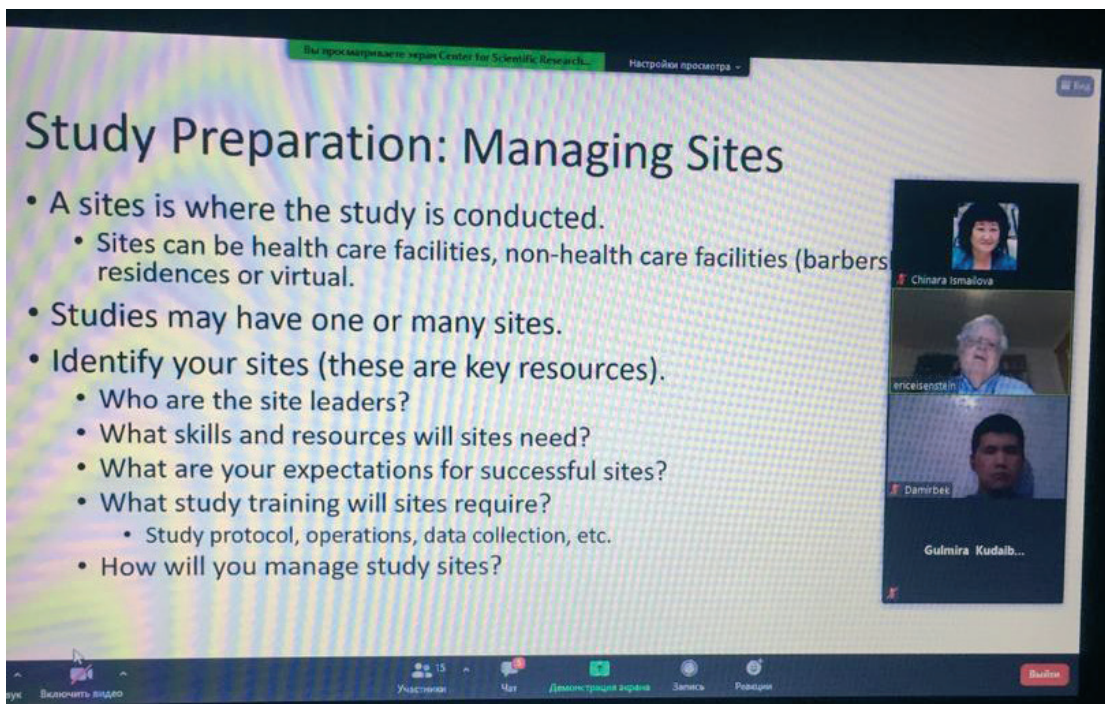
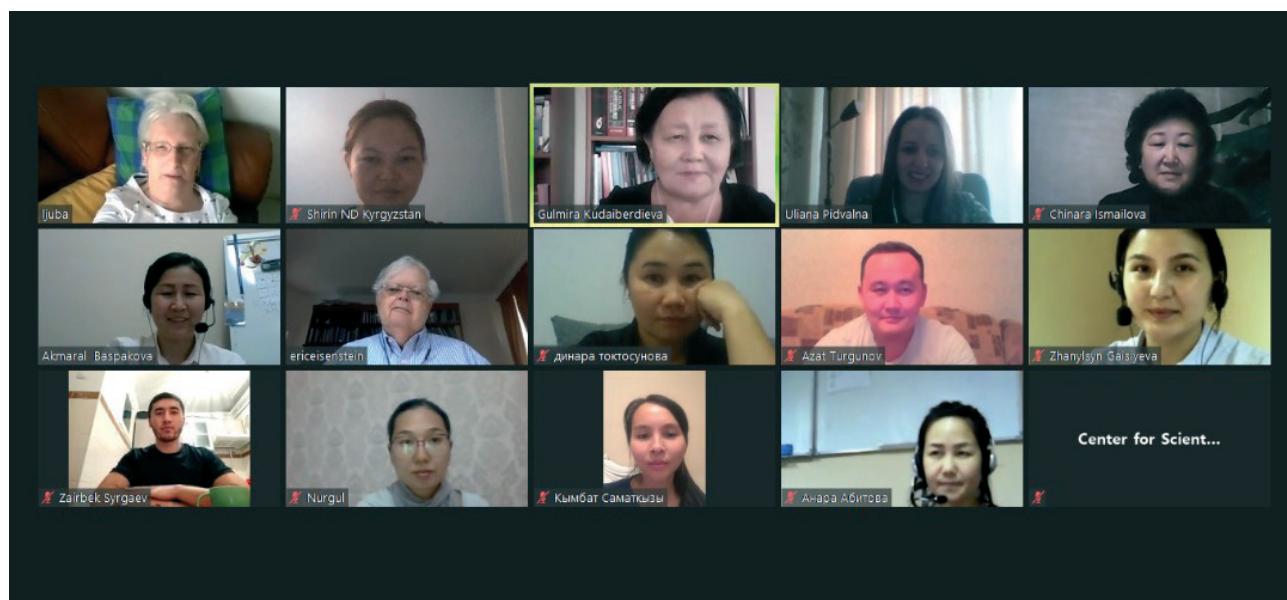
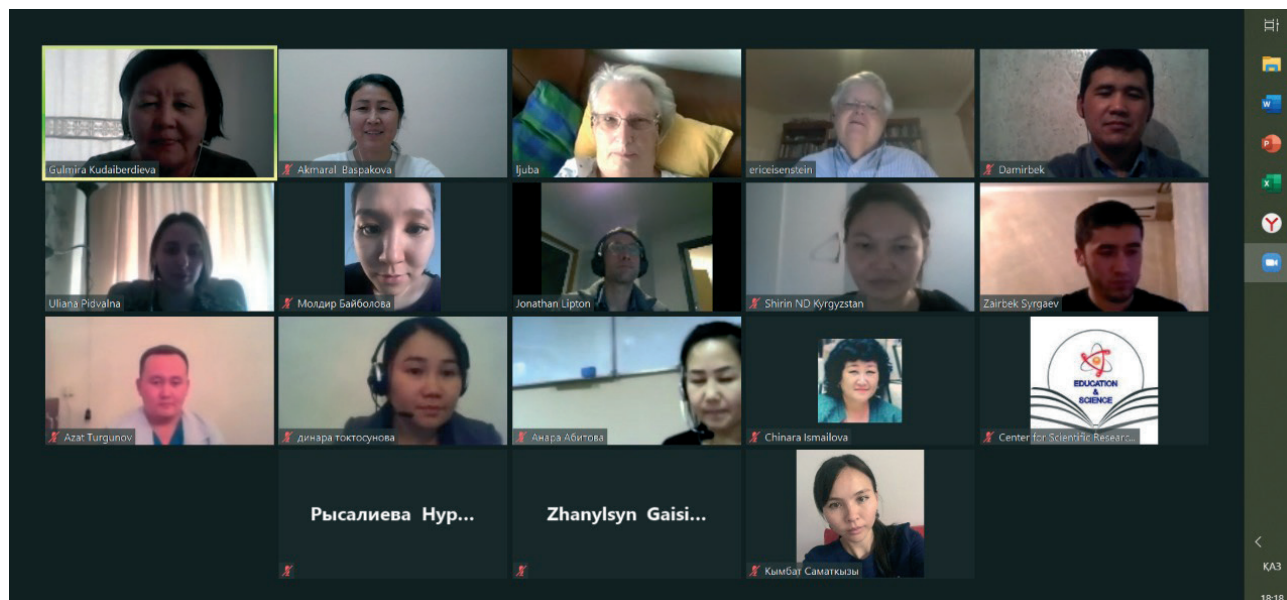


Figure 2. Faculty presentation of workshop 4 – Eric Eisenstein



**Figure 3. Workshop - discussions of projects**

**Summary and conclusion**

- The IRIS Kyrgyzstan 2020 demonstrated that the on-line arrangement of these courses is feasible and the IRIS can achieve its goals. However, in spite of all the benefits and pros, the importance of the personal communication and advantage of environment and meeting outside of routine work and daily duties was repeatedly stressed. The fully on-line arrangement represents a powerful added possibility, can be used as a valuable supplement or even as a substitution under defined conditions like global pandemics.
- The crucial factors are the time management, a good

quality and flexible technical support, and the last not least the effective moderation and facilitation of discussions.

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The Tekes waterfall, Almaty region, Kazakhstan, August 2020. Dina Dyusupova, Aktobe, Kazakhstan