

# Education

## IRIS Slovakia 2022: Utilizing the experience from the on-line IRIS courses

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### Introduction

IRIS Slovakia 2022 was held on-line in September 21 -24, 2022. Although the COVID pandemic looked as regressing, it was not possible in December 2021 – January 2022 (when the decision had to be made) to predict the epidemiologic situation in September 2022. Therefore, a decision was made to be on the safe side and organize an on-line course. For the second time the IRIS course was organized under the patronage of the Ministry of Education, Research, Science and Sport of the Slovak Republic, what reflects the growing recognition of the IRIS courses.

During the 16 years of IRIS courses, the key characteristics have been defined and maintained: the courses are interdisciplinary, international and eligible for those interested in biomedical research. In the history of the IRIS courses already four on-line courses were organized – the first partly on-line course IRIS Slovakia 2020, then the first completely on-line course IRIS Kyrgyzstan 2020, followed by the on-line courses IRIS Slovakia 2021 and 2022. During this period a considerable experience with the on-line arrangement has been gained, for the organizers, the faculty as well as for the participants. This report summarizes the key moments from the IRIS Slovakia 2022 course.

The program followed the standard schedule of 4 workshops:

Workshop # 1 Project selection and Introduction to research proposal

Workshop # 2 Research design and methods I: Study population and outcomes

Workshop # 3 Research design and methods II: Data collection and analysis

Workshop # 4 Research administration

Final presentations

### Faculty and organizers

Some interesting changes were introduced regarding the faculty. The role of the so-called “core faculty” was to introduce individual workshops and moderate/facilitate discussions: Ljuba Bacharova (Slovakia), Eric Eisenstein (USA), Jonathan Lipton (New Zealand), Gulmira Kudaiberdieva (Kyrgyzstan), Peter Skrak (Slovakia), Uliana Pidvalna (Ukraine), Katarzyna Piotrowicz (Poland), Anna Mierzynska (Poland), and Natalia Sabolova (Slovakia).

Additionally, a so-called “extended” faculty was created of a flexible set of additional faculty members with the “part-time” participation in discussion, according to their availability and special interests. It included a spectrum of researchers and university teachers, one editor of a scientific journal, and a CEO of a company involved in biomedical research: Mustafa Inan (Turkiye), Nina Hakacova (Sweden), Lubica Murinova (Slovakia), Zora Krivosikova (Slovakia), Brigita Benkoova (Slovakia), Daniela Farkasova (Slovakia). The idea of inviting “extended” faculty is strongly related to the building of and extending the network of faculty, to provide additional input to the discussions from different perspectives, to simulate “conference” discussion. It reflects a continuous effort to build further international as well as national faculty capacities.

And last but not least, interesting personalities were invited for discussions, this year it was Lukas Bielik (Slovakia), a professional interested in general methodology of science, in the models of scientific explanation and deductive and non-deductive arguments.

### Participants and projects

The participants came from five countries: Austria, Germany, Slovakia, Sweden, Ukraine, and USA. The total number of participants was 12, so three groups of 4 participants were created.

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They developed the following projects during the course (Fig.1):

1. Group CHOL-GAST study: Association between hypocholesterolemia and gastric cancer in adult population (Anastasiia Shaparets, Sunita Pokhrel Bhattarai, Miriam Kozárová)
2. Group Recto-stat-ineers: The association between tumor blood flow measured by MRI in patients

with locally advanced colorectal cancer and relapse (Daniel Ruman, Lea Christierson, Luca Ochs and Valerii Orel)

3. Group Four Funny Figures: Incidence of Deep Vein Thrombosis (DVT) in Patients older than 60 years before (2014 – 2018) and during (2019 – 2023) COVID-19 pandemic (Valerie Hartig, Rasa Fuchs, Viktoriia Kostyshena, Lukas Zelieska)

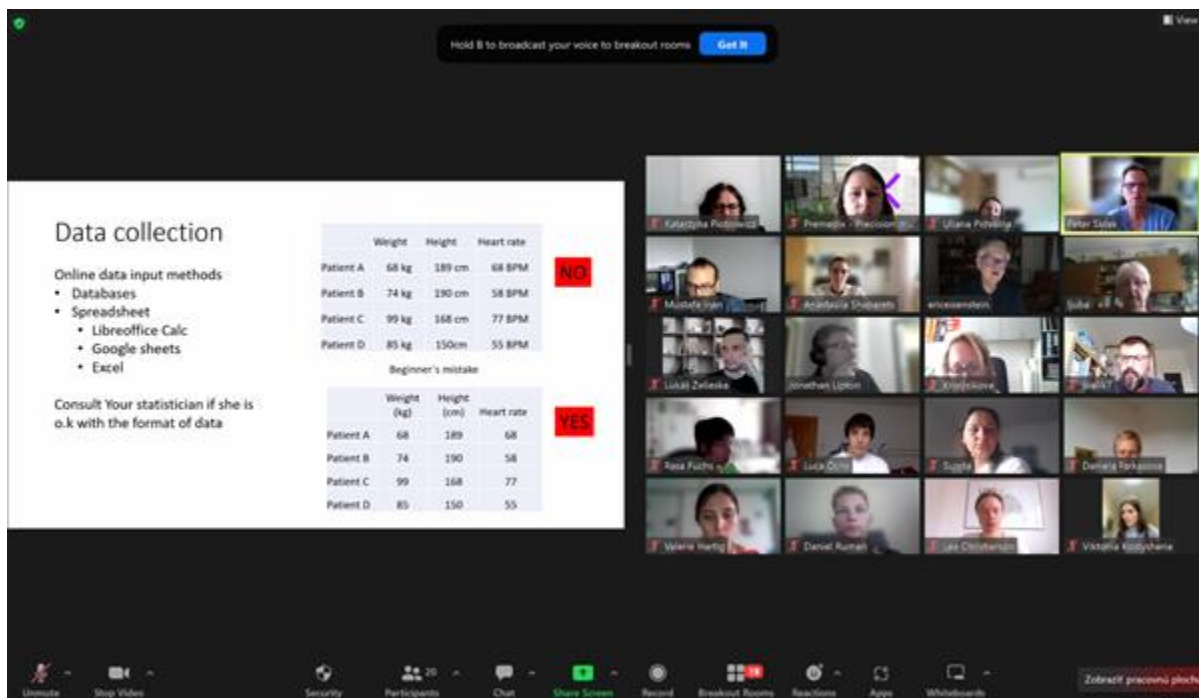


Figure 1. Discussing the data collection

The geographic scope of the faculty and the participants was rather broad. For participants it included Europe and North America, and for the faculty North America – Europe – Central Asia – Australia. The variety of locations required a careful adaptation of the logistics considering the considerable differences in time zones. Therefore, for the first time the beginning of the program was shifted to the afternoon hours and lasted till evening (if the central European time is taken as the reference). Surprisingly it was a good compromise: for the European participants the mornings could be utilized for their clinical or other duties, for those located in places with extreme time differences it was still acceptable.

Interesting enrichment of the program was the modification of the WS#4: the experience with preparing and running a real project, originally rooted in discussions during IRIS 2021 was presented as a panel discussion by Eric Eisenstein, Anna Mierzynska and

Natalia Sabolova. Natalia Sabolova, a psychologist from Kosice, Slovakia, showed her deep interest in the topic of the action crisis during IRIS 2021, so the faculty offered her the support in finding partners and in international mentoring during the project development. The decision was made in October 2021 and the team of Ljuba Bacharova, Eric Eisenstein and Katarzyna Piotrowicz, as international mentors, Natalia Sabolova and Anna Mierzynska as the researchers, and Monica Hricova, as Natalia's supervisor, started regular on-line meetings. The first experience showed that developing the idea and its adaptation according to the feasibility, including the administration related to the approval with local authorities required much longer time as compared to planning anticipated during developing a training project at IRIS. The administration and management of the project is the key topic of the WS#4. Our experience supports the idea to prepare a focused course specifically on the project management.

## Conclusion

Our experience with the on-line mode of training is increasing: we have been gaining more experience with using Zoom or alternatively MS Teams. The three-year exposure to on-line connections brought its benefits – the on-line format is now a natural way of communication for the organizers as well as for the faculty and participants.

There were also some limitations. While the advantage of the in-person courses is an intensive interaction between faculty and participants practically during the whole day – either formal or informal, in on-line format the duration of the program has to be limited to maximum 8 hours and the interaction is more formal. However, on the other hand the in-person courses are more expensive, more time-consuming for participants as well as for faculty.

For the future, we can build on the positive experience. The solution can be a “hybrid” arrangement – especially the faculty and observers. If the epidemiologic situation will allow, we would like to reestablished the in-person courses with extended on-line discussion by inviting inspiring faculty and observers.

A strong message from the preparation of the real international project is the need to pay sufficient attention to the WS#4 – the project management and administration, also considering a possibility to prepare an additional specific course on project management and administration.

## Some feedbacks:

Thank you for a perfect event. I am (and also my group members) looking forward another cooperation. Nice organization of School and very good support. Thanks.  
Lukas Zelieska, Slovakia

It was a valuable time for me to highlight the key steps in designing a research project, working in team and hold scientific discussions with faculty members. I am sure the acquired skills would be a great basis for my participation in research projects in these difficult times in Ukraine.

Valerii Orel, Ukraine

Overall, I am very pleased with the course. In the beginning, I was a bit frustrated that it was so specific, but over time I realized the benefit of this. I would have liked more comprehensive lectures though, where all terminology would have been explained a bit more in detail, now I am left with the feeling of having to look up what a lot of the terminology actually entails. I did enjoy the group work a lot though, I learned more than I expected from it.

Lea Christierson, Sweden

Finally!! I'm here! First, I'd like to thank you for the invitation. It's really a great honor for me to be a part of the Faculty Team. This year I felt much more comfortable asking questions. In previous years, I tried to give suggestions, instead of asking. I'm learning with our participants)). I see a big difference between students from the West (the USA, the Swiss...) and the East (Poland, Ukraine, and the Slovak Republic). It seems we are less confident and the IRIS teaches us not to be afraid to ask and to stand on our idea. I really like it. So, my suggestion is to involve more participants from other countries (especially from the West) to have intercultural communication and exchanges. Moreover, I'm thinking of an idea to perform the IRIS school offline after our Victory. We must invite IRIS to our Ukrainian PhD students. Anyway, we can create an official agreement between Your Institution and our University and try to get some grants for this purpose (nowadays there are a lot of possibilities). I'd be happy to receive feedback from Your side. It's important to me to know if you're happy with my assistance. I'd be very thankful for the recommendations. I'm waiting for the offline project to see you and fully feel the IRIS atmosphere.  
Uliana Pidvalna, Ukraine (faculty)

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