The Scientific Summer School in Turkey 2007 İstanbul - Silivri, June 30 - July 5, 2007

Bilimsel Yaz Okulu - Türkiye 2007 İstanbul - Silivri, 30 Haziran - 5 Temmuz, 2007

"How to define the best the significance of the study, so that the editor will accept the manuscript and the reader will be attracted to read the paper?"

"What will be the main message of my study?"

"Is the hypothesis of the study sufficiently clear?"

"Is the design of the study relevant with respect to the aim of the study?"

"What size of the population is needed?"

"What statistical method shall I use to test the hypotheses?" "How to plan a research study to make it feasible?"

"How to prepare a manuscript?"

"When shall I start to prepare the manuscript?"

"Who is the target reader for my manuscript?"

"What lesson to learn from the rejection of my manuscript by the editor?"

"How to communicate with the editor and to handle the reviewers' comments?"

These questions and many others ask themselves people who are at the beginning of doing research and writing manuscripts for scientific journals. And these are the questions asked not only by beginners - these questions are ingredients of every planning, preparation and running of scientific projects and preparation of a scientific manuscript. Answers to these questions were offered the Scientific Summer School in Turkey 2007 (SSSiT 2007), which was held in Istanbul - Silivri, just after the 34th International Congress on Electrocardiology.

The SSSiT was organized under the patronage of the International Society of Electrocardiology and of three scientific journals: the Journal of Electrocardiology, the Anatolian Journal of Cardiology and the Croatian Medical Journal. The International Faculty included (in alphabetic order) Liuba Bacharova, International Laser Center, Bratislava, Slovakia, the Executive Editor of the Journal of Electrocardiology, the Secretary of the International Society of Electrocardiology; Ana Ivanis, Editor of the Croatian Medical Journal, Gulmira Kudaiberdieva, the Executive Editor of the Anatolian Journal of Cardiology, Aleksandra Misak, the English language Editor, Bilgin Timuralp, the Editor-in-Chief of the Anatolian Journal of Cardiology, Galen Wagner, Duke University Medical Center, Durham, NC, USA, the Editor-in-Chief of the Journal of Electrocardiology, member of the International Council of Electrocardiology, and Maryam Yavari, Teheran University, Iran. The number of participants was twenty four from six countries (Croatia, Macedonia, Poland, Serbia, Slovakia, Turkey), with professional backgrounds in medicine (mostly in cardiology, oncology and public health), molecular biology and biophysics. Nina Hakacova and Jana Kirchnerova (both from Bratislava, Slovakia), contributed with their facilitation skills acquired during the previous Scientific Summer School 2006.

The SSSiT program is based on the training module used for Duke University pre-graduate and post-graduate training of students and consists of four workshops

• Workshop #1: Introduction with hypothesis generation: The introductory workshop stresses the need to define the significance and message of the study, it requires to focus on the key relevant knowledge in particular topic, so that the aim and the hypotheses the study can be clearly defined.

• Workshop #2: Methods I: Study population and outcomes: In this workshop the participants discuss and define the population of the study in terms of relevance and availability. The primary and secondary outcomes of the study are defined and evaluated in term of their relevance for the study hypotheses.

• Workshop # 3: Methods II: Data collection and analysis: Design of the study and collection of the data, including the management, storage and analysis of the data are the key topics of this workshop, together with the discussion on the statistical methods which will be used for the hypotheses testing, including the effect size, alpha, and power that will be used for this study.

• Workshop # 4: Research administration: The last workshop is oriented on the planning and management of the study, so that the research study will be feasible and the expected outcome the publication of the results in a scientific journal - will be achieved.

The SSSiT represented already the second opportunity to transfer the method of this problem-based educational intervention to non-native English speaking scientific trainees in the Central and Eastern European countries. The transfer of this teaching method developed by Galen Wagner and Eric Eisenstein in the Duke Clinical Research Institute (DCRI) into various settings outside of Duke University has been already reported (1,2).

Before the first workshop, the SSSiT participants were voluntarily divided into four groups, and each group identified a project based on their scientific and professional interests. The process of selection of a common group project represented a very effective training for a focused presentation of own research interests, a search for common professional interests, negotiation, argumentation and motivation of potential partners for a team collaboration. International background of participants

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CAPRI: Characterization of Type 2 Diabetic Patients Rejecting Insulin Injection (Marija Kisman, Macedonia, Jana Kirchnerova, Slovakia, Ahmed Ramiz Baykan, Turkey, Banu Sarer Yürekli, Turkey, Serdar Öztora, Turkey);

CSAR: Cardiac Synchrony in Aortic Regurgitation (Zehra İlke Akyıldız, Şerafettin Demir, Çağrı Semirgin, Cem Köz, Oben Baysan, all Turkey);

ROCI: Influence of Radiotherapy On Cellular Antitumor Immunity in Advanced Cervical Cancer (Vedran Velagic, Croatia, Ksenija Jakovljevic, Serbia, Emine Satır, Turkey, Alexandra Eric, Serbia, Ognen Petrovski, Macedonia);

RORY: Rate Or Rhythm Control Strategy in the Young Adults with Atrial Fibrillation

(Ömer Alyan, Turkey, Çayan Çakır, Turkey, Hakan Doğan, Turkey, Nina Hakacova, Slovakia, Artur Klimczak, Poland, Tunay Şentürk, Turkey).

The program of the workshops provided maximum space for discussions, both within the groups, as well as for common discussion. The Faculty of the Summer School acted as moderators and facilitators of discussions - it was a fundamentally new experience for some of the participants, who had been expecting classical didactic way of teaching. From this point of view, it was very interesting to observe the dynamics of the groups during the Summer School - from the initial distance, uneasiness and concerns from discussions, to passionate and focused scientific discussions not only during the sessions but also during breaks and meal time (Figure 1 - 3). It was also shown, that a conflict of opinions does not mean a conflict with people, on the contrary, a team can benefit from different ideas and opinions.



Figure 1. The participants of the Scientific Summer School in Turkey, 2007. The first row from left to right: Bilgin Timuralp (Turkey), Alexandra Misak (Croatia), Gulmira Kudaiberdieva (Turkey), Ljuba Bacharova (Slovakia), Nina Hakacova (Slovakia), Gozde Isman (Turkey). The second row: Jana Kirchnerova (Slovakia), Banu Sarer Yürekli (Turkey), Zehra Ilke Akyıldız (Turkey), Alexandra Eric (Serbia), Artur Klimczak (Poland), Ksenija Jakovljevic,(Serbia). The third row: Hakan Doğan (Turkey), Emine Satır (Turkey), Ana Ivanis (Croatia), Şerafettin Demir (Turkey), Çağrı Semirgin (Turkey). The fourth row: Ahmed Ramiz Baykan (Turkey), Vedran Velagic (Croatia), Ognen Petrovski (Macedonia), Cem Köz (Turkey). The fifth row: Marija Kisman (Macedonia), Oben Baysan (Turkey), Ömer Alyan (Turkey), Serdar Öztora (Turkey), Çayan Çakır (Turkey).

The inherent part of the program were discussions on creation links among participants with the aim to build a network for the dissemination of the experience and skills acquired during the SSSiT into working environment of participants, and for collaboration on common research projects, as well as for building of the international faculty network.

As it was already mentioned, this year Summer School was the second one. Organizing the first meeting is always exciting, since it is the first experience. However, organizing the second one was exciting none the less as we had the opportunity to develop the idea further, attract new participants, build and cultivate the international faculty and hopefully, make the Summer School a traditional yearly event.

I take this opportunity to thank our partners Professor Bilgin Timuralp, his wife Dr. Gökhan Timuralp and Professor Gulmira Kudaiberdieva for their valuable contribution and enthusiasm in the preparation of the Summer School and its course.



Figure 2. Working in groups: How to calculate the sample size? From left: Çayan Çakır (Turkey), Zehra İlke Akyıldız (Turkey), Alexandra Misak (Croatia), Omer Alyan (Turkey).



Figure 3. Vedran Velagic (Croatia) (in the center) moderating a common discussion. On his left side from the left: Bilgin Timuralp (Turkey), Gulmira Kudaiberdieva (Turkey), Ognen Petrovski (Macedonia), Ksenija Jakovljevic (Serbia); on his right side speaking Nina Hakacova (Slovakia), sitting from the left: Ana Ivanis (Croatia), Jana Kirchnerova (Slovakia), Banu Sarer Yürekli (Turkey), Marija Kisman (Macedonia).

Excerpts from the feedback provided by the faculty from a distance of several weeks:

"The scientific summer school held in Turkey was an important event and experience for participants and faculty. All participants have shown the solid basis in their specialties, which along with scientific knowledge they have gained during summer school, will help them to make significant contributions in science. Though at the very beginning workshop seemed to be a bit stressful, there was a general agreement that this was the extremely effective way of learning how to plan the scientific project and write manuscript. I was mostly impressed by enthusiastic work of participants in groups, passionate debates and round discussions of projects. The professional relationships and friendships were also the main revenues of SSSiT." (Gulmira Kudaiberdieva)

"... the support and organization of Ljuba, Galen and the faculties whose eminent experts on their areas has realized a meeting that serve for the goals. From the beginning, the practices and discussions has created the kind of information that will stay in memories for years .The participants especially from Turkey have gained the experience that they will probably never have this opportunity in other occasions. A big friend group from a wide variety of different countries and cultures has been formed - synthesized in a frame of basic human values. I hope, on behalf of my colleagues and journal, that succeeding meetings will be held in this frame of discipline and this is going to be the convention of all forthcoming meetings". (Bilgin Timuralp) "I will always remember this SSSCIT 2007 meeting as the unique for the cardiology, biochemist and pediatric meetings that I participated or observed in my country and abroad. It is a ccepted that this meeting was completely helpful and remarkable/noticeable by those participated. The hospitality of the Probiz Management & Organization Consultancy has ensured that many inconveniences has been avoided that may otherwise bother the holders and participants." (Gökhan Timuralp)

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References

- 1. Davis TH, Wagner GS, Gleim G, Andolsek KM, Arheden H, Austin R, et al. Problem-based learning of research skills. J Electrocardiol 2006; 39: 120-8.
- Bacharova L, Misak A, Wagner G. The Scientific Summer School in Slovakia, Liptovsky Jan, June 20 - 25, 2006. J Electrocardiol 2006; 39: 437-9.