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## Progress of ISSS in Turkey from 2007 to 2010: on the eve of the 2014 event

The need for research training is well recognized and acknowledged by academic faculty members and their students, residents and fellows (1-3). Though there are dedicated fellowship programs, which provide the research training to fellows through mentoring or involvement in clinical research programs, the broader audience of physicians and residents in training are lacking such experience (4-6). As medicine has become "evidence-based", it is crucial for physicians to understand and follow the constantly renewing knowledge presented in published literature, specifically clinical trials and meta-analysis, systematic reviews, which form the basis for guidelines for clinical practice (7-10). Clinical societies that provide certification in their specialties have included the requirement of scholarly activity for certification in parallel with development of different courses and types of research training (11-15). The studies demonstrated high satisfaction of graduates of specialty programs, even they did not pursue research carrier (6). Having the experience of work as an editor of cardiology journal. faculty of the International Scientific Summer School (ISSS) and exchanging opinions with editors of international journals, the main observation is that many young researchers who author articles in scientific biomedical journals lack knowledge on formulating the research question of their study, and accordingly have difficulty of designing, analyzing and using proper language in presenting and discussing their data.

From this perspective, the ISSS provides a unique opportunity of interactive training on how to design the research project, conduct it, and present it in an article in a biomedical peerreview journal.

The ISSS initiative has been started in 2006 by the Journal Electrocardiology and the Croatian Journal of Medicine and then joined by the Anatolian Journal of Cardiology in 2007 (16-19). The curricula and methods of research training are published elsewhere (6). In 2007 the summer school was organized by the Anatolian Journal of Cardiology in Silivri, Istanbul, Turkey with faculty members represented by Journal of Electrocardiology (Ljuba Bacharova, Galen Wagner), Croatian Medical Journal (Sasa Misak and Ana Ivanis), the Anatolian Journal of Cardiology (Bilgin Timuralp and Gulmira Kudaiberdieva) and participants from Croatia, Macedonia, Serbia and Turkey. The next summer

school in Turkey was distinguished by broader geographic representation of participants-Albania, Austria, Egypt, Hong Kong, Slovakia, Turkey and USA, as well as Faculty. In 2010 the ISSSiT (ISSS in Turkey) took place in Gebze, training facility of TUBITAK in Istanbul, Turkey. The faculty included editors of JECG-Galen Wagner and Ljuba Bacharova and AKD-Bilgin Timuralp and Gulmira Kudaiberdieva, and Balkan Medical Journal-Mustafa İnan and faculty members: Samuel Bell - USA, Oben Baysan-Gülhane Military Medical Academy, Turkey, Nina Hakacova-Children's Hospital, Sweden, Temel Kerem and Uğur Mert-Eskisehir Osmangazi University, Turkey.

Participants' of both summer schools included residents in training, and junior faculty members in different subspecialties in medicine, biology, biomedical and computer engineering. Overall, overwhelming progress has been made by participants of both summer schools in Turkey in their scholarly activity-the number of participants who have published articles increased by 32% (before ISSS 56% had published research and after ISSS-78% has earned publication) and number of publications in peer-reviewed journals increased more than 100%. The detailed analysis on outcome of overall ISSS training is on the way, the number of articles published by participants of both summer schools in Turkey is 203, and the number of citations increased up to 464, which shows that published research has received scientific acknowledgement. The participants not only improved their scholarly activity but also acquired teaching experience serving as Faculty member and facilitators in summer schools-2008-2013 and extended their experience in international collaboration, working in teams and English language skills, and have acquired the directions for further self-study and development. Though we have not performed a survey study of participants of summer schools, the feedback we continue receiving is their willingness to participate for the second time in SSS, designed for further advanced research training, which means the method of teaching has been embraced by most. We believe the participants who are already enrolled in fellowship training received deeper insight in research in addition to training they have been already receiving at their departments and provided by their supervisors as well, and those who selected clinical practice can use the knowledge they acquired for their

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self -education and following and understanding medical literature and implementing the best clinical practice recommendation provided in auidelines.

In addition, the ISSS provides platform for Faculty from different countries for exchange and sharing knowledge and forming basis for further collaboration.

This year ISSS will be held in Enez, Edirne-Turkey and will be hosted by Balkan Medical Journal (joined by Journal of Electrocardiology and the Anatolian Journal of Cardiology) and faculty of ISSS and participants look forward for new exciting experience.

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## References

- Wyngaarden JB. The clinical investigator as an endangered species. N Engl J Med 1979; 301: 1254-9.
- Wyngaarden JB. The medical curriculum at Duke University. Bull N Y Acad Med 1973: 49: 293-8.
- Wagner GS, Long, TT, Reichert TA, Wester MW Jr, Kerr CM, Bishop C, et al. Partners in education: the academic medical center and the community hospital. NC Med J 1984; 45: 591-7.
- Wagner GS, Engblom H, Billgren T, Carlsson M, Hedstrom E, Ugander M, et al. A method for assembling a collaborative research team from multiple disciplines and academic centers to study the relationships between ECG estimation and MRI measurement of myocardial infarct size. J Electrocardiol 2001; 34: 1-6.
- Ostbye T, Krause KM, Gradison M, Eisenstein EL, Wagner GS. A problem-based approach to teaching outcomes research in family medicine residency. Fam Med 2004; 36: 470-2.

- Davis TH 3rd, Wagner GS, Gleim G, Andolsek KM, Arheden H, Austin R, et al. Problem-based learning of research skills. J Eelctrocardiol 2006; 39: 120-8.
- 7. Council of Europe: Developing a Methodology for Drawing up Guidelines on Best Medical Practice. Committee of Ministers of the Council of Europe 2001.
- Evidence-Based Medicine Working Group. Evidence-based medicine. A new approach to teaching the practice of medicine. JAMA 1992; 268: 2420-5.
- Feldstein DA, Maenner MJ, Srisurichan R, Roach MA, Vogelman BS. Evidence-based medicine training during residency: a randomized controlled trial of efficacy. BMC Med Educ 2010; 10: 59.
- Zwolsman S, te Pas E, Hooft L, Wieringa-de Waard M, van Dijk N. Barriers to GPs' use of evidence-based medicine: a systematic review. Br J Gen Pract 2012: 62: e511-21.
- 11. Accreditation Council for Graduate Medical Education. ACGME Program Requirements for Graduate Medical Education in Cardiovascular Disease (Internal Medicine) (7/2013). Available at:URL:http://www.acgme.org/acgmeweb/Portals/0/ PFAssets/2013-PR-FAQ-PIF/140 internal medicine 07012013.pdf Accessed March 9, 2014.
- 12. Baughman KL, Duffy FD, Eagle KA, Faxon DP, Hillis LD, Lange RA. Task Force 1: Training in Clinical Cardiology. J Am Coll Cardiol 2008; 51: 339-48.
- 13. The Executive Committee of the European Board for the Specialty Cardiology, Guidelines Recommendations of the European Board for the Specialty Cardiology (EBSC) for education and training in basic cardiology in Europe. Eur Heart J 1996; 17: 996-1000.
- 14. Kanna B, Deng C, Erickson SN, Valerio JA, Dimitrov V, Soni A. The research rotation: competency-based structured and novel approach to research training of internal medicine residents. BMC Med Educ 2006; 6: 52.
- 15. Penrose LL, Yeomans ER, Praderio C, Prien SD. An incremental approach to improving scholarly activity. J Grad Med Educ 2012; 4: 496-9.
- 16. Bacharova L, Misak A, Wagner G. The Scientific Summer School in Slovakia, Liptovsky Jan. June 20-25, 2006. J Electrocardiol 2006; 39: 337-439.
- 17. Misak A, Bacharova L. The early role of scientific journals in supporting young scientists to become independent researchers. J Electrocardiol 2008; 41: 248-9.
- 18. Bacharova L, Kirchnerova J. Continuous international network building to promote scientific publication: Scientific Summer School, Pezinok, Slovakia, May 25-30, 2008. Anadolu Kardiyol Derg 2008: 8: 319-21.
- 19. Kudaiberdieva G, Lipton J, Mozos I, Stanczyk A, Bacharova L, Wagner GS. International Scientific Summer Schools 2013. J Electrocardiol 2013; 46: 441-3.