Title of the activity: Improving Skills of Biology Teachers in Serbia

Nature of the activity: Educational workshop for high school teachers

Location: Petnica Science Center, Valjevo, Serbia

Dates: 25 - 27 March 2016

Number of participants: 19 teachers from Serbia and Bosnia and Herzegovina

Short description of the program:

Main goals of the three-day workshop were to provide teachers with up to date knowledge and skills that would encourage them to become active participants of the public dialog on topics related to evolutionary biology and discuss current topics with their students. Each day was focused on one of the three evolution-centred topics currently frequently debated in the national and regional media: evolution vs. creationism, synthetic biology/GMOs, effects and importance of vaccination. Besides lectures from a diverse panel of experts (see list below), various hands on activities were organized. Participants developed novel teaching tools and were working hard to improve their science communication skills. During the workshop, teachers produced resources, including annotated and critically analysed press articles intended to be used in classes and school clubs.

In total, 43 applications were received, 20 teachers were selected to participate in the program, and 19 of them attended the workshop. List of participants and agenda of the workshop are given bellow.

Participants were highly motivated to actively participate in the workshop, and many of them sent feedback from their home schools after the workshop. Teachers found numerous creative ways to implement new information, teaching tools and resources gathered at the workshop to their classes.

Some of the participants comments in the final evaluation are given bellow:

- This is one of the best workshops I have ever attended!
- I really liked the fact that all the lecturers were present during the entire course, which made the discussions really vivid and useful.
- All the lectures were of high quality, and carefully selected topics and speakers made this workshop a great success. I especially enjoyed the lecture on synthetic biology with diversity of examples that can be used to present this topic to students.
- The atmosphere during the conference was amazing. I enjoyed long discussions and I am really grateful to all the lecturers and organizers for their hard work. The venue is also amazing, and I would love to come back to Petnica soon for another program.

Lecturers and organizers:

- Dr. Tanja Adnađević, Research Associate, University of Belgrade, Institute for Biological Research “Siniša Stanković”
- Nikola Božić, deputy director, Petnica Science Center
- Dr. Vladimir Jovanović, Research Associate, University of Belgrade, Institute for Biological Research “Siniša Stanković”
- Dr. Dušan Mišević, scientific coordinator, Center for Research and Interdisciplinarity, University Paris Descartes, Sorbonne Paris Cité
- Tomica Mišlenović, Head of Department of Biology, Petnica Science Center
- Bojana Mićić, Department of Biology, Petnica Science Center
- Dr. Biljana Stojković, associate professor, University of Belgrade, Faculty of Biology
Improving Skills of Biology Teachers in Serbia

Petnica Science Center, 25 - 27 March 2016

Friday, 25 March

11:00 – 12:00 Registration
12:30 – 14:00 Introduction to the program, opening workshop
14:00 – 14:45 Lunch
16:00 – 17:30 Introduction to evolutionary biology – dr Biljana Stojković
17:30 – 17:45 Coffee break
17:45 – 18:45 Population genetics – dr Tanja Adnađević
18:45 – 20:00 Population genetics - workshop; teaching materials
20:00 – 20:45 Dinner
21:00 – 22:00 Petnica Science Center – campus tour+tour of the labs

Saturday, 26 March

09:00 – 09:45 Breakfast
10:00 – 11:00 Genetic engineering (metods and techniques, applications, ethics) – dr Tanja Adnađević
11:00 – 11:45 Synthetic biology – dr Dušan Mišević
11:45 – 12:00 Coffee break
12:00 – 12:30 Science & media – introduction -
12:30 – 14:00 Analysis of selected press articles - group activity
14:00 – 14:45 Lunch
16:00 – 17:15 Vaccination – history, importance, misconceptions– dr Vladimir Jovanović
17:15 – 17:30 Coffee break
17:30 – 20:00 Analysis of selected press articles - group activity
20:00 – 20:45 Dinner
21:00 – 22:30 Analysis of selected press articles - discussion

Sunday, 27 March

09:00 – 09:45 Breakfast
10:00 – 10:30 Evolution vs. creationism – dr Biljana Stojković
10:30 – 11:15 Selected videos + discussion
11:15 – 11:30 Coffee break
11:30 – 12:45 Major misconceptions about evolution among your students - discussion
12:45 – 14:00 Examples from the classroom + discussion
14:00 – 14:45 Lunch
15:00 – 15:45 Evaluation of the program
16:00 Departure of participants