

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 Cite
- **Tomica Mišljenović**, Head of Department of Biology, Petnica Science Center
- **Bojana Mičić**, 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 (methods 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



Photos



Photos

