



# SUMMARY OF ACTIVITIES REALIZED WITHIN THE PROJECT “EDUCATION OF CLINICAL DISCIPLINES IN PRE- AND POST-GRADUATE STUDY FORMS ORIENTED ON INCREASING OF NEWEST INFECTIOUS DISEASES KNOWLEDGE USING TELEMEDICINE TOOLS”

**Majerník Jaroslav, Jarčuška Pavol**

*Faculty of Medicine, Pavol Jozef Šafárik University*

## **D1.5 E-LEARNING**

**Keywords:** *education, infectology, video streaming, video gallery*

We applied telemedicine techniques to offer our students but also to all interested persons the latest knowledge from the area of infectious diseases, their prevention and treatment. This presentation summarizes main activities we realized during three years period of the project where specialized and scientific sessions were live streamed, archived and shared through video gallery on our faculty portal.

Sharing of medical knowledge over a long distance has relatively long history and is usually referred to telemedicine applications. Because of changes in curriculums and related transferring processes based on more effective utilization of modern e-learning tools in education at our faculty, we decided to create a methodology that combines advantages of face-to-face and distance education into the teaching approach useful for our students, but also for other persons interested in infectology topics. From technological and historical point of view, there were various methods used to distribute educational content to remote students all around the world. Therefore, live broadcasts of scientific and educational sessions were captured and then processed, archived and shared as on-line video-clips to be accessible anytime and anywhere. The structure of our methodology respects two main requirements. The first, is the ability to distribute live education events to the almost unlimited number of users and the second one represents accessibility for the users having no special technological equipment.

Most of the infectology related lectures were broadcasted using video streaming technologies. Here, the students were able to view the streams on their own computers wherever it suits them rather than having to take part in a face-to-face lecture. Considering our previous experiences and our technical equipment we decided to use RealNetworks Helix technology to stream live education events. Individual live video streams were broadcasted as free to join events, so everybody interested in particular topics was able to watch them. However, there are often various objective reasons why some of the sessions cannot be viewed when broadcasted. Therefore, the raw video records were used to prepare archive of audiovisual lectures including DVD movies, compressed video formats for web as well as interactive presentations. Educational outputs were processed to be available for students in both on-line and off-line forms. The faculty's web portal of multimedia support in the education of clinical and health care disciplines ([portal.lf.upjs.sk](http://portal.lf.upjs.sk)) was selected as the most suitable platform to share already prepared multimedia outputs and as the best way to offer them to the students and public. Also the links to the Moodle e-learning courses are integrated in this portal because of existing interconnection between MEFANET activities.

We realized web based approach to disseminate medical educational content including latest information about infectious diseases, their treatment and prevention to the undergraduate and postgraduate students at medical faculties, as well as to the clinical professionals and specialists and to the wide range of interested population. The combination of traditional teaching methods and new technological innovations brought advanced teaching and learning tools for our teachers and students.

*Acknowledgement: Results presented in this work were obtained with the support of the national grant KEGA 005UPJS-4/2012.*