

# TRAIN 4 ORTHOMIS

## Online Vocational Training course on ergonomics for orthopaedic Minimally Invasive Surgery

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### NEWSLETTER Issue 05/2017

**Project acronym:**

TRAIN4ORTHOMIS

**Project full title:**

Online Vocational Training course on ergonomics for orthopaedic Minimally Invasive Surgery

**Project Reference:**

2014-1-ES01-KA202-004533

**Duration:**

01-09-2014 – 31-08-2017

**Coordinator:**

Instituto de Biomecánica de Valencia



Fig. Example of virtual working environment – anthropometric models of surgeons in the operating room.

### EDITORIAL

Welcome to the fifth Train4OrthoMIS newsletter, which will provide you with an overview of the current project phases and the current activities.

The main objective of this project is development and implementation of an online course regarding orthopaedic Minimally Invasive Surgery of hip and spine. The e-learning tool resulting from the project will be available online in 4 European languages (English, Spanish, Polish and German) in order to increase interest to use the course.

### MEETINGS

#### MID TERM AND STEERING COMMITTEE MEETING TRAIN4ORTHOMIS PROJECT

11th October 2016, Murnau (Germany)

### NEWS

#### ⇒ Second Mid-Term and Steering Committee meeting Train4OrthoMIS project

The Consortium of the Train4OrthoMIS project took part last 11th October in Train4orthomis meeting (Online Vocational Training course on ergonomics for orthopaedic Minimally Invasive Surgery) at BGU MURNAU facilities (Germany).

The main objective of this project is the development of the contents and the implementation of an online course to assure surgeons a worthy education and training along their professional career regarding ergonomics and usability applied to orthopaedic Minimally Invasive Surgery of hip and spine, matching product innovation



with the needs of orthopaedic surgeons and the latter with their working environment. The e-learning tool resulting from the project will be available online in 4 European languages (English, Spanish, Polish and German) in order to increase acceptance of the course. Train4OrthoMIS project will cover the lack of training of MIS surgeons, will improve the knowledge/capacities of the European professionals and will provide new skills for emergent activities that these of workers should carry out in their work.

The idea of the TRAIN4ORTHOMIS course is to assure surgeons a worthy education and training along their professional career regarding ergonomics and usability applied to orthopaedic Minimally Invasive Surgery of hip and spine.

Further information in the attached file and in TRAIN4ORTHOMIS website (<http://train4orthomis.eu/>) This initiative is funded by European Commission Programme Erasmus +.

### ⇒ Information about International Conference ITMED 2016

**Train4orthomis project** udostępnił(a) link.  
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**International Conference ITMED 2016**  
International Conference ITMED 2016 KOMAG, Train4OrthoMIS project partner, presented the project at International Conference ITMED 2016. The conference took place on 7-9 November 2016 in Warsaw.  
TRAIN4ORTHOMIS.EU

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### ⇒ Information about planned presentation at the AHFE 2017 conference

**Train4orthomis project** udostępnił(a) link.  
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**Train4OrthoMIS Project will be presented in AHFE 2017**  
Train4OrthoMIS Project will be presented in AHFE 2017 Title : Train4Ortho: MIS online course as a manner of improving ergonomics in orthopedic surgery  
TRAIN4ORTHOMIS.EU

## PLANNED DISSEMINATION ACTIVITIES

11-12 May 2017 International Symposium '30th Anniversary of Olizarov method in Poland  
Venue: Wroclaw, Poland



22-23 June 2017: XI International Hospital & Healthcare Management Conference 2017  
Venue: Warsaw, Poland



## PROJECT CONSORTIUM

Silesian University of Technology



Fig. The research team involved in Train4OrthiMIS project

## Silesian University of Technology

The Silesian University of Technology (SUT) was established in 1945 as the first technical university in Upper Silesia, the most industrialized region in Poland. Presently SUT has 18 faculties, employing almost 2,000 academic and research staff, including over 150 full professors and over 200 DSc. SUT has carried out numerous research and educational projects within different European Programmes Framework Programmes and Horyzont 2020, Erasmus+ and others.

As an organization with a big research and teaching potential exerts a stimulating impact on the growth of the south of Poland and significantly contribute to the creation of the economy based on knowledge management. SUT has become an important public culture and opinion-forming institution especially in Silesia region. This region is a home for industry and has a significant meaning for the economic and social development of the whole country. The end of the industrial era caused the change in the direction of the development of Upper Silesia to knowledge based economy, particularly the pro-innovative activities.

In particular, these activities are focused on improvement of working processes in health care system. The research activities are based inter alia on cooperation with hospitals located in different parts of Poland.

In this regard, SUT disposes laboratories which specialize in creating virtual working environments of hospital processes with the use of human body modelling methods. Particularly Train4Ortho MIS is performed in the Laboratory of Occupational Safety and Ergonomics that is the part of Institute of Production Engineering. The Laboratory operates several computer systems for simulation in virtual working environment, ergonomics tests and biomechanical analysis. In addition the research equipment for wireless body posture capturing while performing real working processes is used in ergonomics and workflow studies.

Particularly the experts working at this Laboratory are the key researchers engaged within Train4OrthoMIS project. This team has wide experience in using virtual reality technologies in diagnosis and improvement of working conditions within surgical processes.



Erasmus+

TRAIN4ORTHOMIS

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