A web-based e-training platform for

Extended Human Motion Investigation in Orthopedics

www.ortho-eman.ro

ORTHO-eMAN

Project 2011-1-RO1-LEO05-15321 (Contract LLP-LdV/ToI/2011/RO/008)

Partners:

- University of Craiova (Romania)
- National Center for Scientific Research "Demokritos" (Greece)
- Biomechanics Institute of Valencia (Spain)
- Clinical Emergency Hospital Bucharest (Romania)
- Democritus University of Thrace (Greece)

Biomedical Engineering Education in Europe

Biomedical Engineering (BME) combines the design and problem solving skills of engineering with biological and medical sciences to improve healthcare diagnosis, monitoring and therapy. Significant biomedical engineering applications include the development of various diagnostic and therapeutic medical devices ranging from clinical equipment to micro-implants, common imaging equipment such as MRIs and EEGs, regenerative tissue growth, pharmaceutical drugs and therapeutic biological.

Education in BME varies greatly around the world. Many engineering schools in Europe now have a Biomedical Engineering Department or Program, with offerings ranging from the undergraduate to doctoral levels. The number of biomedical engineers is expected to rise as both a cause and effect of improvements in medical technology.

The BME education in Spain, Greece and Romania has some common characteristics: it is organised for all levels of academic education (undergraduate, graduate Master's level and PhD level), similar standards and professional competences for BME education are developed in all these countries, and incipient e-learning systems for BME education are implemented.

E-learning in Biomedical Engineering Education

The rapid developments in the last years not only require a well-prepared work force but also rapidly adapting training programs. In this case, distance learning is a viable alternative, motivating the development of a number of web-based learning environments. In this context there is also an increased need for e-learning methods, tools and platforms to be used in biomedical engineering education.

Needs Assessment for E-learning in Medical and Bioengineering Field

The main objective of this survey is to set the characteristics of the training course that will be developed during the **ORTHO-eMAN** project, and to evaluate the learning necessities in human motion investigation in orthopedics.

The report constitutes the point of departure for the integration and adaptation of the teaching contents that will be carried out during the second work package of the project.
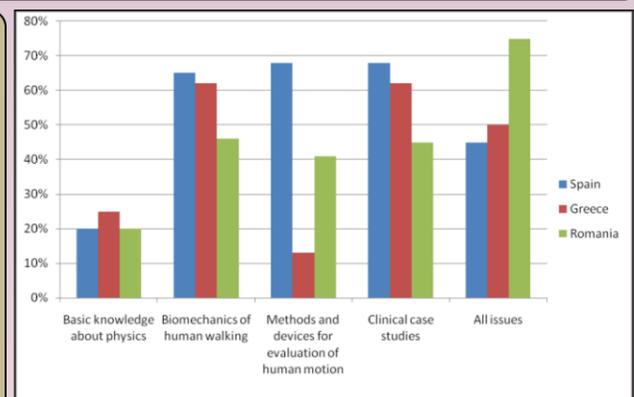
Data collection was done by auto-fulfilled questionnaire. Independent surveys were conducted for the four profiles defined of interest for the project development: · Managers of medical departments;
· Academic medical staff;
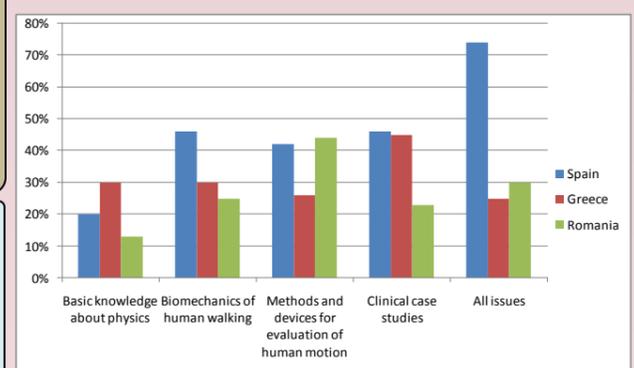· Medical residents and medical doctors;
· Engineers, bioengineers.

More information on www.ortho-eman.ro/results

The training interests for Spanish, Greek and Romanian residents and medical doctors

The training interests for Spanish, Greek and Romanian engineers/bioengineers

Registration for ORTHO-eMAN

The process of registration for developed e-learning course is now open. If you want to register as a trainee for human motion analysis course, you can access the ORTHO-eMAN project website (**www.ortho-eman.ro**), Registration menu. You will receive information about the necessary steps to graduate this course. *The target group will be formed by residents, medical doctors in course of gaining competence especially in orthopedics and by engineers.*