

PROJECTS

LEARNING THROUGH SIMULATION AT THE VIRTUAL HOSPITAL

**TOTAL INVESTMENT
EUR 8855010**

**EU CONTRIBUTION
EUR 4084010**

The Lorraine Virtual Hospital (HVL) provides students and health professionals with medical simulation equipment and tools. Responding to the challenge of ‘never for the first time on a patient’, the hospital is supported by the ERDF and run by the University of Lorraine’s Collegium-Santé, which brings together the faculties of medicine, dentistry, pharmacy and sports sciences.

Opened in January 2018 on the site of the Nancy University Hospital in France, the HVL provides simulation-based learning for many medical and paramedical health professionals in both hospital services and private practice.

It comprises the CUESIM (University Centre for Training by Simulation), the CESU (Emergency Care Teaching Centre), the School of Surgery, Odontology (forensic dentistry), MéMoSim’S (Centre of Expertise in Metrology, Modelling and Simulation in Health and Sports), and a hospital pharmacy for internal use. There is also a care area with beds and a simulation platform for managing high infection risks.

Learning through simulation has many advantages. Students and healthcare professionals can develop technical and behavioural skills before carrying them out on actual patients.

Training can proceed at their own pace, in a more independent manner and with greater safety, for example when handling toxic products. They are able to gain experience in automated techniques, and can self-assess by being filmed and then debriefed, as well as through virtual reality and interactive ‘serious games’.

Different professions learn to work better together, moving away from ‘compartmentalised’ training. Ultimately, patients

will benefit as health professionals can focus more effectively on the patient, be attentive to their needs, and provide them with better support.

Fostering start-ups

The virtual hospital has been instrumental in providing new educational programmes. The first training courses started in 2016 for 1 000 and 1 500 general practitioners, emergency physicians and surgeons. The target figure is 4 000 to 5 000 professionals per year.

Several university degree courses related to the virtual hospital have already opened, and at least 16 shorter professional development courses will also run.

Furthermore, two start-ups linked to the HVL have been launched: one specialises in robotics and the other in nanotechnology. The University of Lorraine is employing around 10 doctoral students as part of this European Regional Development Fund project, and a number of fixed-term contracts have been created for administrative functions.

The HVL is also involved in medical research activities, research and development (expertise in new medical devices), and educational research (developing new simulation tools).

In addition to Collegium-Santé, three organisations support the HVL – the University of Lorraine, the CHRU and the Lorraine Institute of Cancer Research – and it also collaborates with other research hubs and industrial partners. ■

FIND OUT MORE

<http://www.hvl.healthcare/>