

# Experiential Learning Using a Health Informatics Simulation Lab

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## Abstract

Training a skilled and experienced health informatics workforce is critical to realizing the full power of health information technologies. An innovative baccalaureate program in Health Informatics at the Oregon Institute of Technology incorporates a computer Simulation Lab (SIM Lab). The SIM Lab

includes real-world health information applications and technologies providing hands-on, case-based experiential learning and research opportunities for undergraduate students and faculty. The poster presentation describes the SIM Lab and select student projects.

## Description

The demand and need for training a skilled and experienced health informatics workforce is critical to realizing the full power of health information technologies.<sup>1-5</sup> The Oregon Institute of Technology's (OIT) innovative baccalaureate level academic training program in Health Informatics, which began in 2007, includes a unique simulation lab. The simulation lab provides learning and research opportunities using virtual patient data for all health informatics, allied health, computer science, engineering and information technology disciplines to help meet the demand and need in this important field.

The SIM Lab is comprised of fully functional health information technologies (HIT) such as clinical and management information systems including practice management systems, electronic health records, secure messaging, document management, remote monitoring devices and patient portal systems.

The SIM Lab provides unique educational and training opportunities, which include case-based learning, class projects, independent study, research projects, application training, configuration and support, inter-university project collaboration and demonstration projects for students. Multiple test environments in the Lab allow a wide range of ongoing projects to be conducted simultaneously.

Students can interact with a variety of HIT while assuming a number of different roles, such as end-user, application administrator, support specialist, systems analyst, and database administrator. The SIM Lab creates a fertile learning experience for group and inter-disciplinary team projects. Graduates who are trained using the SIM lab experience will gain the skills and experience necessary to immediately contribute in health care IT and informatics positions at community hospitals and clinics, health insurers, software vendors, consultants and other health care employers.

## References

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