

Operating Room of the Future (FOR)

Gabriel Kiss

Norwegian University of Science and Technology, Trondheim, Norway

Abstract. The “Operating Room of the Future” (FOR) is a collaboration between St. Olavs Hospital, the University Hospital of Trondheim and the Norwegian University of Science and Technology (NTNU). The most important goal for FOR is research to obtain better and more safe patient care, more efficient logistics and better architecture of operating departments. Teaching is also an important task for FOR. FOR is an arena for research and development which includes six operating rooms, in various clinics. The operating rooms are unique “laboratories” made for the development, testing and clinical implementation of new technology and new treatment modalities.

Since it fosters multidisciplinary collaboration with close interactions between clinicians, technologists, scientists and industry, FOR is a research platform where new prototypes can be developed and tested under safe conditions. The most modern medical and visualization equipment will be available at FOR.

FOR is also an example of how various professional disciplines and medical specialties can utilize the same equipment, areas and competence. Both clinical and animal studies are offered to interested parties. At FOR there is a possibility to perform a broad spectrum of scientific work of multi-disciplinary character. Research can be carried out by PhD candidates, scientists, students and clinicians. In addition several bachelor and master degrees are performed at FOR.

FOR is also a partner in the Norwegian Centre for Minimally Invasive Image Guided Therapy and Medical Technologies (NorMIT). NorMIT offers a large infrastructure for image-guided minimally invasive therapy and medical technology. It focusses on research and development into areas such as logistics, workflow, communication, organization, and the transmission of high-resolution images. The NorMIT equipment is available for internal and external partners.

St. Olavs Hospital and the Norwegian University of Science and Technology, NTNU, are forerunners in developing an integrated university clinic by joining university and hospital. Research and teaching is a natural part of the integrated hospital activity. The students face patients from day one, and take part in an attractive and integrated learning environment. In the new buildings, researchers, students and health care providers work side by side. This provides for a close cooperation between clinical and basic research and makes the “Trondheim Model” unique both nationally and internationally.

Copyright © 2016 by the paper's authors. Copying permitted for private and academic purposes.

*In: G. Cumming, T. French, H. Gilstad, M.G. Jaatun, E.A.A. Jaatun (eds.):
Proceedings of the 3rd European Workshop on Practical Aspects of Health Informatics
(PAHI 2015), Elgin, Scotland, UK, 27-OCT-2015, published at <http://ceur-ws.org>*

