



Alberta Children's Hospital



UNIVERSITY OF CALGARY
CUMMING SCHOOL OF MEDICINE



KidSIM Elective in Simulation Education and Research

KidSIM Pediatric Simulation Program

Resident / Fellow Elective Simulation Rotation Information

KidSIM Simulation Program Overview

Medical Director: Dr. Vincent Grant, MD, FRCPC

The KidSIM Pediatric Simulation Program at Alberta Children's Hospital (ACH) has been training health care professionals both as individuals and as part of interprofessional teams since October of 2005. Since that time, the KidSIM Program has grown significantly and is responsible for the training of over 4,500 learners per year. These learners come from all levels of training, from undergraduate learners all the way through to practicing health professionals. They come from diverse backgrounds, everything from rural EMS providers to operating room nurses to attending pediatric intensivists, among many others, both at the Alberta Children's Hospital site, as well as via outreach education to providers in the broader Calgary community, and regional and rural healthcare providers in Southern Alberta and Southeastern British Columbia.

The KidSIM program works to provide learners surrogate clinical experience with pediatric patients in as close to a 'real-life' situation as possible through the use of high-fidelity mannequins as well as teaching space that mimics the clinical setting as closely as possible. In doing so, it is hoped that the learners experience the pressure and stressors of the real situation, as they work as individuals and in teams, in order to learn more about the assessment and management of these cases.

This realism is further enhanced by moulage of the patients, providing the real results of tests and adding personnel to the case to act in various roles (parent, consultant, etc). Evaluation of the scenarios and of the program as a whole, are overwhelmingly positive, with a common theme being the request for more and more sessions. In the first 7 years of the program, there has been incredible growth in the number and diversity of learners, as well as growth in the number of areas incorporating simulation into their overall education plan.

The mission of the KidSIM Program is to support interprofessional education by working together with physicians, nurses and allied health care providers to ensure optimal accessibility, innovation, leadership and excellence in pediatric experiential learning and simulation education. Simulation is an essential component to meet current and future demands related to healthcare education, experiential learning, team crisis resource management, patient safety, workforce utilization, and clinical research.

Since 2005, the program has grown from one mannequin, one basement laboratory at the former ACH site, and a handful of trained educators to one of the broadest and busiest pediatric simulation programs in the world. Through on-going support from the Department of Pediatrics and the Alberta Children's Hospital Foundation, the program now boasts greater than 80 trained simulation education facilitators, 12 high-fidelity mannequins spanning infancy to adolescence, and the largest Pediatric simulation centre in Canada, a 3,900 square foot facility on the 4th floor of the ACH.

The KidSIM Program has become known for several innovative programs, including: 1) an interprofessional training program for undergraduate students from the faculties of medicine, nursing and respiratory therapy, for whom this opportunity is the first they have had in their clinical training to work and learn alongside other



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health professionals; 2) a simulation program aimed at providing families hands-on education and feedback about how to look after their children with significant medical needs; 3) an internationally- recognized faculty development curriculum called ASSET: Advanced Skills for Simulation Educators & Teachers; 4) a highly regarded and successful simulation outreach program to the regional and rural centres in Southern Alberta and Southeastern British Columbia; and 5) the KidSIM-ASPIRE Research Program (Assessing Simulation in Pediatrics: Improving Resuscitation Education) aimed at performing high quality research in the areas of debriefing and feedback, interprofessional education and team training, simulation in the context of family-centred care, faculty development and maintenance of facilitation competence, and evaluation of new and novel technologies in both the simulated and real clinical environments.

The KidSIM Program is a proud partner of eSIM, the provincial simulation program in the Province of Alberta, as well as a founding member of the Canadian Pediatric Simulation Network. The Program is also affiliated with INSPIRE, the International Network for Simulation-based Pediatric Innovation, Research and Education, (www.inspiresim.com) and IPSS, the International Pediatric Simulation Society (www.ipedsim.com).

Elective Rotation Overview

The elective rotation has four major components:

1. Simulation Program Operations: This will primarily involve reading to be provided by the Medical Director of the KidSIM Program.
2. Scenario Development: There is an expectation that a rotating resident / fellow will create one complete simulation scenario, including multimedia components, during their rotation. Scenario design is part of the ASSET Foundations course, and there is an existing standard simulation scenario template being used across the provincial eSIM program of AHS. The progress of this scenario development will be reviewed at the weekly status meetings with the KidSIM Education Team.
3. Simulator Technical Skills: During the rotation it is hoped that electives will become more familiar and proficient with the simulation equipment. When electives attend simulation events during the rotation it is important to also spend some time watching the experienced facilitators running the mannequins and attempt to help out in running the computer.
4. Debriefing Skills: The majority of time will be spent in the observation and debriefing of teams that are being taught via simulation. It is very important to become involved with the debriefing team and gather valuable experience while paired with more experienced facilitators. This will make the experience both safe and rewarding.

Electives will be provided with a calendar of events that are taking place during the rotation. It is very important to participate in as many simulation events as possible, also attempting to choose from across the broad range of types of simulation events. This schedule will be reviewed by the Medical Director at the beginning of your rotation to ensure that the necessary volume and breadth of experienced will be achieved.

At the completion of your rotation, an In-Training Evaluation Report (ITER) will be completed and forwarded to the resident's / fellow's Program Director. This evaluation will be a compilation of all of the experiences during the rotation, and input from all co-facilitators will be sought. An exit interview and final evaluation will be performed with the Medical Director.