

Halifax – October 14, 2011

## **Future of Brain Surgery Unfolds in Halifax**

Neurosurgery has been learned on the job for more than 100 years, but that's about to change. It will soon be possible to learn, practice and rehearse neurosurgical skills and neurosurgery without patients, by using new simulation technology. A group of national and international brain surgeons, researchers, educators and engineers are gathered in Halifax to map out how to integrate the use of a simulator (simulation) into neurosurgical training – to establish a training program that will change the way brain surgery is taught and learned in Canada and around the world.

“The integration of simulation into neurosurgical training is pressing – and exciting – because it heeds universal calls for greater patient safety and responds to the need for better and more efficient use of healthcare resources,” says Dr. David Clarke, professor of neurosurgery at Dalhousie Medical School, head of neurosurgery at Capital Health and member of the Brain Repair Centre. “Using a simulator as a training tool will lessen the need to practice certain skills on patients and will enable trainees and surgeons to rehearse surgeries outside of the OR, thereby increasing greater OR efficiency,” he explains.

Dr. Clarke and Dr. Ryan D’Arcy of the National Research Council (NRC), Brain Repair Centre and Dalhousie Medical School, are collaborators on an NRC project to develop a simulator for brain surgery. In 2009, Dr. Clarke performed the world’s first virtual brain surgery at the QEII Health Sciences Centre to remove a brain tumour. That particular simulator continues to be developed and is available only at six NRC test sites, including Halifax.

At the time of its first use, Dr. Clarke said, “This simulator will become a key component of neurosurgical training and will help to optimize patient outcomes and recovery.” The two-day meeting on October 14 and 15, which is an initiative of the Brain Repair Centre, is a huge step toward making this happen.

“The neurosurgical simulation work to date in Halifax is attracting attention across the globe. A group of Israeli delegates, who first expressed interest in the simulator at a Canada/Israel Summit, is among the meeting’s international attendees,” says Dr. D’Arcy. “The potential to shape the future of brain surgery here and around the world by developing an advanced neurosurgical training program is tremendous,” he says.

*The Halifax-based neurosurgical simulation curriculum work and the October 14 & 15 meeting are collaborative efforts supported by the Royal College of Physicians and Surgeons of Canada, the National Research Council, the Brain Repair Centre, Dalhousie University, and Capital Health.*

To learn more or to speak with Dr. Clarke, Dr. D'Arcy or other meeting delegates, contact Paula Chiasson, [paula.chiasson@cdha.nshealth.ca](mailto:paula.chiasson@cdha.nshealth.ca)