## \$15 million investment aims to make Southlake, York U an innovation hub



## By Brock Weir

Astronaut and surgeon Dr. Dave Williams, President and CEO of Southlake Regional Health Centre, has seen a lot of the world from high above, but on firm ground, in recent years, he has seen rapid changes in the field of health care.

Now, thanks to a \$15 million Federal investment in a collaboration between Southlake, York University and the University Health Network, those changes are set to significantly increase.

?We live in a time where Google can predict a flu outbreak before the Centre for Disease Control, where a computer scientist like Dr. Carolyn McGregor and her Artemis project can diagnose sepsis in newborns with data streaming before clinicians can actually diagnose a clinical condition,? said Dr. Williams. ?The world is certainly changing and, with the investment of the Canadian Government through FedDev (Federal Economic Development Agency for Southern Ontario), we are leaping forward to change with it, and we are at the forefront of leading that change.?

Dr. Williams was on hand to introduce Dr. McGregor, her Artemis project, and several other leading innovative researchers to Navdeep Bains, Canada's Minister of Innovation Science and Economic Development, Newmarket-Aurora MP Kyle Peterson and a host of other dignitaries on Thursday as the Minister toured the local hospital ahead of his \$15 million announcement.

Artemis, and Dr. McGregor, were among a handful of innovations showcased to show the fruits of this collaboration, ranging from online programs to track the health and individualized care of patients living with chronic illness, including depression, and new ways to treat patients with heart failure and other organ ailments.

For Minister Bains, an investment such as this is one step towards making Canada a centre of global innovation and, in turn, a place where this innovation can be used to transform how Canada addresses healthcare across the board.

?The most innovative solutions often happen when people with diverse, yet specialized skills, come together for a common purpose,? said Mr. Bains. ?That is why it is important for universities, health care providers, the business community and government to work together. It truly requires a collaborative effort. The management of chronic disease has become a major challenge around the world. Three out of every five Canadians live with at least one chronic disease and the rates are rising steadily every year. We're headed in the wrong direction and the cost of chronic disease is high in terms of the physical and mental toll it has on people's lives and it also affects how much Canadians spend on health services both through their taxes and out of their pockets.?

Statistics show the treatment of chronic disease costs the Canadian health care system \$39 billion annually, or 42 per cent of all health care budgets across the country. That is why, he said, the Federal government needs ?to invest in better ways to provide patients with the right information at the right time to manage chronic diseases more effectively.?

?This investment will support the development of better, more precise ways for providers and patients alike to manage chronic disease. It will fund 72 collaborations and commercialize up to 37 new technologies,? he added. ?It will create nearly 130 highly skilled and well-paying jobs for Canadians working in the emerging field of personalized medicine while also helping to foster a thriving middle class here.

?These technologies help make use of the vast amounts of clinical data available to tailor health services to the needs of individual patients and I can tell you data is going to be so critical as we move forward in this area. With personalized medicine, the age of one-size-fits-all medicine is effectively over.?

The announcement was, of course, welcomed by Dr. Williams, as well as Mamdouh Shoukri, President of York University, who was also on hand for the announcement. For Dr. Williams, this collaboration is all about ?technology transforming care? and the benefits it can bring to the economy.

?It is a story about how we can convert health care from being an economic drain to being economic gain for Canada, he said. ?We have talked about entrepreneurs working in basements and garages, but what can be more exciting than thinking about the types of technologies they are able to develop from a vision that starts in that environment and bringing it to the forefront of healthcare??