



Vancouver spine conference

Regeneration breakthrough nears for discs

(VANCOUVER, B.C. 29 April, 2007) - Dr. Mark Erwin, a Toronto medical research scientist, told a conference here this weekend that he and his team hope to announce within the next few months a breakthrough that could eliminate expensive and painful surgery for thousands of patients suffering from degenerative disc disease.

Dr. Erwin, a chiropractor who also has a PhD as a scientist, is an Assistant Professor, Department of Orthopaedic Surgery at the University of Toronto and Toronto Western Hospital. He holds the Canadian Chiropractic Research Foundation (CCRF) and Canadian Institutes of Health Research (CIHR) Chiropractic Research Chair at the University of Toronto.

The conference brought together some of the foremost research scientists in the world today dealing with neurophysiological issues. The British Columbia Chiropractic Association (BCCA), with the support of the School of Human Kinetics at the University of British Columbia and the School of Kinesiology at Simon Fraser University, hosted these distinguished doctors and scientists from several universities and major hospitals in Canada and the U.S., including one from Harvard Medical School.

One of the speakers, Dr. Greg Kawchuk of the University of Alberta and the University of Calgary said he was grateful to meet so many distinguished leaders in the field, adding that it is very rare that they have an opportunity to compare notes. "There is no clubhouse where we all hang out. This is a historic event, bringing us all together," Dr. Kawchuk said.

Dr. Erwin's report was eagerly anticipated by all of the doctors and scientists attending. He told the conference about his team's work concerning the biology of notochord cells and degenerative disease of the intervertebral disc. The investigation concerns the production of proteoglycan by nucleus pulposus chondrocytes and various aspects of cell signalling. This research is essential to enhancing our understanding of and the pathophysiology of this process.

He told the conference that the average cost of "fusion" surgery to stabilize degenerated discs is \$37,000 in the U.S. and \$25,000 in Canada. There are 300,000 such procedures a year in the United States. The number is growing fast each year and, "there is not much evidence that fusion really works," Dr. Erwin said.

Dr. Simon Dagenais of the University of Ottawa, said that spine problems cost \$200 billion a year in the United States, half in the direct cost for treatment, hospitalization and surgery and the other half in indirect costs, meaning lost employment, workplace productivity and related concerns. He said it is third overall in surgery costs, and the number one issue for orthopaedic and neurosurgery; number two in doctor visits each year and fifth overall among all causes for hospitalization.

Other conference highlights were:

- Harvard's Dr. Geoffrey Bove discussed the mechanisms of pain, particularly those associated with nerve injury and musculoskeletal disorders, and neurobiological mechanisms related to manual therapy.
- Dr. Jill Hayden of Toronto Western Hospital outlined the overwhelming amount of health and scientific literature produced each year in 2 million new articles published by 40,000 biomedical journals - impossible for any doctor to absorb, even when narrowed down to their own specialty. She reported about The Cochrane Library, an international effort to index and update all of this literature in a manageable and more easily digestible fashion.
- UBC's Dr. Jean-Sebastien Blouin delivered an update on his landmark work that has achieved substantial media attention dealing with whiplash. His scientific presentation focused on neural control of deep and superficial neck muscles.
- Dr. Max Donelan, a SFU kinesiologist whose PhD is from the University of California (Berkeley), spoke about fundamental principles that underlie the physiology of leg locomotion as well as the application of these principles to improve human health.
- Dr. Deborah Kopansky-Giles, a professor at Canadian Memorial Chiropractic College, and a leader in an Ontario Ministry of Health funded project integrating chiropractic care into a multidisciplinary program at St. Michael's Hospital in Toronto, described an environment where physicians, chiropractors, nurses, physiotherapists and other health professionals work together to help patients recover from injuries to their muscles and joints and to help them prevent future injury. Patients, physicians and other hospital staff are pleased with the results and are actively supporting the need for a permanent program.

Both UBC and SFU played important roles in supporting the conference. Dr. Peter Ruben, the director of the School of Kinesiology at SFU, opening the conference said, "Research drives education at all levels and clinical practice at all levels and within all disciplines." Dr. Robert Sparks, the director of the School of Human Kinetics at UBC, delivered the closing remarks. He complimented the Canadian Chiropractic Research Foundation for its "robust program" supporting university research, which "develops a body of evidence that justifies and helps support clinical practice."

BCCA Executive Director Dr. Don Nixdorf, who organized the conference, said: "It is indescribable to us how proud we are to see members of our profession, who also have outstanding credentials as research scientists, working in partnership with other scientific and health professionals at the front edge of new discoveries."

While all of the speakers symbolized the integration of multiple health and scientific disciplines into hospitals, medical situations and universities, including chiropractic, several said that turf wars and bias still keep most medical doctors and health administrators working in jealously-guarded territory.

Dr. Mark Erwin said "we are slowly breaking down these silos, but the sacred cows are robustly out there grazing in the fields."

- 30 -

FOR MORE INFORMATION, PLEASE CONTACT:

Dr. Don Nixdorf, Executive Director, BC Chiropractic Association

Phone: 604-270-1332 e-mail: info@bcchiro.com

www.bcchiro.com