Canadian Chiropractic Researchers

Profile - Simon Dagenais, DC, PhD



Simon Dagenais, DC, PhD Research Scientist, Chalmers Research Group Children's Hospital of Eastern Ontario

Simon Dagenais, DC, PhD, left Ottawa in the fall of 1997 to avoid the upcoming winter and study at the Los Angeles College of Chiropractic. During orientation week at LACC, one of the numerous speeches was given by Ian Coulter who encouraged chiropractic students to become more involved in research to help further the profession. This sparked an interest in Simon so he promptly applied for a position as a research assistant in the research division at LACC. Simon soon began working on a variety of

research projects with Clark Danielson, Al Adams, Eric Hurwitz, and numerous other faculty members with varied interests, thus gaining a broad exposure to chiropractic and research methods.

In his second year at LACC, Simon was approached by Paul Hooper about a special opportunity. His friend Scott Haldeman was looking for a research assistant and Paul suggested that Simon meet with him to discuss this. Scott immediately put Simon to work gathering background information for a presentation on cervicogenic headache due the following week. The presentation went well and this work eventually lead to a systemic review article on cervicogenic headache that was published in the inaugural issue of The Spine Journal, the new publication from the North American Spine Society. A productive work relationship, mentorship, and friendship was soon formed between Simon and Scott, with the result that Simon had to give up his Saturdays for the next 6 years since that was the day Scott devoted to research.

While working with Scott, Simon had the opportunity to get involved with a clinical study of a type of manipulation under anesthesia developed by James R. Wooley, a chiropractor in Irvine, California. Funding for this study was provided by Michael Marcus, a patient who had received treatment from Jim and experienced marked improvement after years of debilitating chronic pain. The treatment was termed intravenous analgesia assisted traction therapy (IVSAATT). A prospective cohort study was undertaken to determine the efficacy of this procedure in patients with chronic low back pain and limited flexibility. This project led to several presentations and publications and could lead to a randomized clinical trial in the future.

Upon graduating from LACC, Simon joined Jim's multidisciplinary practice as a clinician, working with an anesthesiologist and surgeon who specialized in chronic musculoskeletal pain. While practicing, Simon continued

to work with Scott on a number of projects, one of which was The Bone and Joint Decade 2000–2010 Task Force on Neck Pain and Its Associated Disorders. The mandate of this Task Force was to make recommendations of clinical practice guidelines for the management of neck pain and its associated disorders. This was in part accomplished through an exhaustive review of the literature for all treatments related to neck pain, followed by a critical appraisal of each research study to determine whether its findings would be included in the evidence that would form part of the Task Force's final report. Simon assisted Scott with these critical literature appraisals, thereby gaining valuable experience in clinical epidemiology, evidence-based medicine, and research methodology.

When Simon discovered that a 3rd edition of Scott's *Principles and Practice of Chiropractic* textbook was being developed, he was eager to get involved and volunteered to manage this project. In that capacity he was responsible for corresponding with contributing authors and section editors, proofreading and editing every chapter in the book prior to Scott's final approval, and working with editors at McGraw-Hill to finalize the book for publication. This experience gave Simon an opportunity to work with the most prominent researchers and clinicians in chiropractic. For his efforts, Simon was named Associate Editor of that text.

After completing the IVSAATT study, Michael was interested in conducting research on another nonsurgical treatment for chronic low back pain called prolotherapy, from which he had also benefited. With funding from Michael to pursue this endeavor, Simon and Jim formed a nonprofit research organization called CAM Research Institute in Irvine, California. Since the substances injected for prolotherapy were not approved by the FDA, an investigational new drug application was required prior to conducting any studies in humans. While conducting research to complete the IND application, Simon began a doctoral program specializing in epidemiology and public health through the Department of Environmental Health Science and Policy at the University of California, Irvine. Part of his elective coursework in epidemiology was completed at the Bloomberg School of Public Health at Johns Hopkins University in Baltimore, Maryland. His dissertation committee at UCI was chaired by Oladele Ogunseitan and also included Scott Haldeman and Chad Garner. Research for Simon's dissertation was directly related to the prolotherapy research he was conducting for CAM Research and included a systematic review, a survey of practitioners regarding side effects and adverse events, a pilot acute toxicity study in rats and swine, and a urinary excretion study of the ingredients in the drug solution. By combining work and studies Simon was able to complete his PhD in only two and a half years, meeting the goal he had set for himself of finishing his schooling prior to turning 30.

While working at CAM Research and completing his dissertation, Simon also had the opportunity to get involved through Scott with Jeff Skoll, the first employee and first president of eBay, to develop a national nonprofit organization devoted to patient education, advocacy, fundraising, and research. Simon helped to manage a feasibility study to determine the financial viability of such an organization. Although over US \$5 million was raised in the form of a challenge grant, this project was put on hold until additional funding can be secured.

Upon completing his PhD, Simon became one of the few chiropractors to gain full membership in the North American Spine Society, the premiere research organization for spine care in Canada and the US. He was recently asked to be co-editor of a special supplement to The Spine Journal on nonsurgical care for back and neck pain to be published next year. Simon has also been invited to join the editorial review board for both The Spine Journal and the Journal of Physiological and Manipulative Therapeutics.

After 8 years in sunny Southern California, Simon left Irvine in the August 2005 to accept a position at the Chalmers Research Group (CRG) lead by David Moher, an internationally respected clinical epidemiologist. The CRG is the clinical epidemiology program at the Children's Hospital of Eastern Ontario Research Institute in Ottawa. While working there as a Research Scientist, Simon will pursue a research and teaching agenda focused on complementary and alternative (CAM) medicine while also consulting with hospital staff on various clinical research projects. A faculty appointment at the University of Ottawa is expected early next year in order for Simon to teach evidence-based CAM to medical students and graduate public health students. Simon looks forward to meeting and getting involved with the Canadian chiropractic research community.