Canadian Chiropractic Researchers

Profile



Stuart M. McGill, PhD

Stuart McGill is a professor of Spine Biomechanics at the University of Waterloo, in the Department of Kinesiology, and is cross-appointed to the Department of Mechanical Engineering. Together with running the spine biomechanics laboratory, he directs the UW-CMCC Chiropractic research clinic which is dedicated to understanding the mechanisms of the therapeutic application of force to the spine. The broader mandate of the spine biomechanics lab has been directed towards understanding how the low back functions, how it becomes injured, and the development of biomechanically based prevention strategies and rehabilitation programs. The success of the entire operation depends on the dedication and quality of the graduate students. With his graduate students, and international colleagues, he has published over 80 papers in scientific journals, and written 11 book chapters. McGill has delivered over 20 keynote addresses to various societies, delivered over 150 other invited presentations and over 75 self-initiated presentations world-wide.

He has also been an invited guest at several institutions throughout Europe, the USA and Australia. He was awarded the prestigious Volvo Award in Biomechanics (Volvo Sweden) – 1986, Julian Christian Award (Human Factors Association of Canada) – 1986, 3M Award for Presentation Excellence – 1989, and the Waterloo Alumni medal as the top graduating PhD of 1986 university-wide, delivered the "Wells Lecture" – an endowed lecture in Australia in 1997, and was the Wood Distinguished Lecturer in the Faculty of Medicine, University of Calgary, 1998. He is currently on the editorial board of Clinical Biomechanics, and the Advisory board of SPINE (both international journals). He was chair for the North American Congress on Biomechanics in 1998 and is currently the President of the Canadian Society for Biomechanics.

I am often asked by my academic and medical colleagues why I would I work with chiropractors. I am, on occasion, openly criticised for doing so. My answer entails asking them do they know what chiropractors do? After they reply "no", it is then easy for me to say that my role as a scientist is to contribute knowledge and solve enigmas. Then, I have to rationalize why I spend some effort on these issues. There is no question now that, according to our data, chiropractic manipulation influences muscle spasm and joint motion, but not always in the way that one may wish. The objective now is to enhance the desirable effects based on experimental data. I have been involved with some chiropractors who I consider to be highly professional innovators and driven by the scientific method -I have also been in contact with the absolute opposite. Chiropractic seems to me to be a profession of extremes. But I think I can now see what chiropractic "could be" versus "what it is" and how it is viewed "to be" by many in the traditional medical establishment. I believe that only the scientific method will assist the progression of the profession. Finally, in my view the profession must come to grips with how new scientific findings will be integrated into practice, and in fact, whether or not to establish a code of practice. Failing to accept the implications of new data, whether they support or refute traditional ideas, and to develop a common code of practice based on sound experiment, will form a major impediment to further progress.