



Canadian
Chiropractic
Research
Foundation

BULLETIN #24 - JUNE 2014



CANADIAN CHIROPRACTIC RESEARCH BULLETIN

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Canadian
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PRESIDENT'S MESSAGE



Dr. Drew Potter, DC
President, CCRF
Glen Morris, Ontario

'Research in Motion'

Early this past fall, I had the pleasure along with Dr. Allan Gotlib of representing the Canadian Chiropractic Research Foundation at a luncheon reception at the University of Guelph. The occasion was to recognize Dr. John Srbely, HonBSc, DC, PhD for his contributions to the Department of Human Health & Nutritional Sciences at the University.

There were about ten people in attendance including the Dean of the College of Biologic Sciences and several of Dr. Srbely's colleagues from the Department and I was impressed by the way we were received as professionals and equals.

As you know, Dr. Srbely is one of many Chiropractic PhD researchers that are working in Universities across Canada and supported by the members of the CCRF. He is a fulltime tenure tracked professor and his research interests lie in the field of clinical biomechanics and neurophysiology. His specific interest is the study of pain and joint function as it relates to aging and chronic disease such as osteoarthritis, myofascial pain and fibromyalgia. He likes to talk about Central Sensitization as a fundamental neuroadaptive process associated with the pathophysiology of pain and disease. Very nice, but how does his work affect the Chiropractic profession? It affects and enhances our profession in a myriad of ways.

There are about 25 members of the department and he works and interacts with them on a daily basis. They all have access to the infrastructure of the university including equipment, labs and all the other resources. This allows him to formulate the right questions and work in a collaborative manner to come to the correct conclusions. These people respect him as a researcher and chiropractor, and by extension, the credibility of the profession as a whole is enhanced.

His research initiatives aim to develop new, and to enhance existing treatment approaches to clinical pain management. This is the kind of research that we keep hearing about from our members (and non-members) that is needed and can be used on Monday morning in chiropractic offices all over the world! Yes, it seems that the results are slow, but they are coming, and from extremely credible sources.

John Srbely is just one of our many Chiropractic researchers that are working tirelessly to improve the standing of our profession in the scientific community and they all deserve our support and appreciation.

Dr. Drew Potter, DC
President, CCRF
drdrew@gto.net

CCRF NAMES TWO NEW DIRECTORS

The Canadian Chiropractic Research Foundation (CCRF) has named Dr. Frank Mangoni, DC (New Brunswick) and Dr. David Peeace, DC (Saskatchewan) to its Board of Directors. The Directors of the Foundation are elected from across Canada.

The CCRF is Canada's oldest and most established national funding body which has been granting research funds for worthy chiropractic projects since 1976. The CCRF is dedicated to facilitating clinical, biomedical, health services, and population health research, relative to the practice of chiropractic. The funding grants provided by CCRF have traditionally supported research in Canada's health care system and Canada's health research system, in order to mitigate the burdens of health, disease, illness, injury and disability that so many Canadians needlessly endure.



Dr. Frank Mangoni received his Bachelor of Science Degree in Biochemistry in 1991 from the University of Toronto. In 1995 he graduated from the Canadian Memorial Chiropractic College and has since been in clinical practice. In the past 19 years of service to the profession, Dr. Mangoni has made very significant contributions to the chiropractic community.

He has served on countless committees during his career, including:

- Vice President, NBCA: 1998–2000
- President, NBCA: 2000–2005
- CCA Governor for NB: 2005–2010
- Chair, NBCA Complaints Committee: 1997–1998
- Chair, NBCA Board: 2005–2010
- Chair, CCA Research Committee: 2006–2010
- Chair, CCA Relocation Committee: 2009
- CCRF, Vice-President: 2010–Present
- GSC Member: 2013–Present

In 2010, Dr. Frank Mangoni, DC was the recipient of the distinguished CCRF President's Citation Award. The Award represents a high level of achievement and commitment to serving the profession and is presented to an outstanding chiropractor whose service reflects the highest ideals of the profession. In 2011 he received the CCA Award of Merit.

Congratulations to Dr. Mangoni!



Dr. David Peeace received his Bachelor of Science Degree in Physiology in 1993 from the University of Saskatchewan. In 1996 he graduated from Western States Chiropractic College in Portland Oregon and has been in continuous clinical practice in both solo rural and multi-doctor urban settings. He has served the profession and his community with distinction

His most notable service includes:

- Second Vice Chair CCA 2012 - Present
- Chair of Audit and Finance Committee 2012 - Present
- Governor, CCA representing Saskatchewan 2008 - 2012
- Co-Chair Government Relations/Intra-Professional Relations committee 2010 - 2012
- Member, Communications Committee 2008 - 2012
- Member, Research Committee 2008 - 2009
- Chair, Strategic Planning Committee 2010 - 2011
- President, Chiropractors Association of Saskatchewan 2005 - 2007
- Vice President, Chiropractors Association of Saskatchewan 2001 - 2004
- Chair, Finance Committee CAS 2001 - 2004
- Member, Public Relations Committee CAS

Dr. Peeace is the recipient of several prestigious awards: the Rawlco Broadcasting Inc. Seeds of Success, Saluting Aboriginal Achievements in Saskatchewan, the Yellow Quill First Nation member achievement recognition for "First Aboriginal Chiropractor in Saskatchewan" and the Women of the Dawn First Nations award for Medicine. Dr. Peeace is a mentor for career and health promotion fairs for numerous first nations, including Yellow Quill, Fishing Lake, Muskowekan, and the Saskatoon Tribal Council as well a speaker at individual classes for Saskatchewan Indian Institute of Technologies.

Congratulations to Dr. Peeace!

ACADEMIC APPOINTMENTS - CONGRATULATIONS!



Academic Appointment
Dr. Simon French BAppSc(Chiropractic), MPH, PhD
Queens University
Cross Appointment: Department of Public Health Sciences

Dr. Simon French has recently been cross appointed to the Department of Public Health Sciences in the School of Medicine at Queen's University. In addition, Dr. French holds the CCRF Research Professorship in Rehabilitation Therapy, School of Rehabilitation Therapy, Faculty of Health Sciences.

Dr. French graduated from RMIT University as a chiropractor in 1993. He went on to receive his Master of Public Health in 1999 from the Department of Epidemiology and Preventive Medicine, Monash University, and his PhD in 2009 from the School of Public Health and Preventive Medicine, Monash University, Australia. His research interests include knowledge translation in primary care with a focus on the management of musculoskeletal conditions. Dr. French has over 50 peer-reviewed publications, as well as several commentaries, editorials, and book chapters.

Congratulations to Dr. French!



Appointment
Dr. Mark Erwin DC, PhD
University of Toronto
Appointment: Sports Hall of Fame at York University

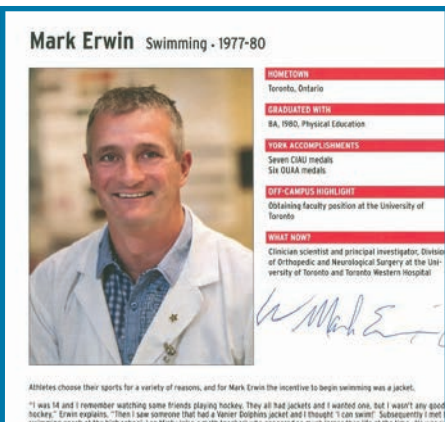
Dr. Mark Erwin DC, PhD was inducted into the Sports Hall of Fame at York University on September 26, 2013 for his significant contributions on the York swimming team.

Mark Erwin (BA '80) had an illustrious career with the York swimming team, winning seven medals at the CIAU championships and six at the OUAA championships over three seasons. In 1978 he won OUAA and CIAU gold medals in the 400m and 800m freestyle relays and another in the 50m freestyle at the provincial championships, and in 1979 he won individual national titles in the 50m and 100m freestyle races as well as provincial silver medals in the same events and a bronze in the 400m freestyle relay. He wrapped up his time at York in 1980 at the CIAU meet with a bronze in the 50m freestyle. Erwin also competed at the 1978 and 1979 open Canadian championships, winning four medals and breaking two Canadian records. He went on to earn his PhD at the University of Toronto in 2004 and used his final year of eligibility at the age of 42 with the Varsity Blues swimming program.

The York University Sports Hall of Fame was created in 1980 to honour individuals who have significantly contributed to York's inter-university sport program as athletes, coaches and administrators, and who have exemplified the spirit and ideals of York University sports in their professional and community life. The selection committee consisted of varsity alumni, current student-athletes and several university administrators.

To read more about York University Sports Hall of Fame visit:
<http://yorku.sidearmsports.com/hof.aspx?hof=96&path=&kiosk=>

Congratulations to Dr. Erwin!



DONATIONS

BACKFIT SUPPORT TO CCRF

Backfit Clinic in Victoria, British Columbia is a spinal healthcare facility specializing in chiropractic. Their team is composed of chiropractors, kinesiologists and exercise therapists with a mission to, “create the most informed, educated, and empowered patients in healthcare”. To achieve this mission they use a combination of evidence-based techniques and implement research-based exercises for the treatment of acute and chronic spinal conditions. As a testament to their dedication to research their doctors have made a donation of \$1831 for their time in lieu of exam fees, to show their support to the CCRF.

The Backfit Clinic has a team of 5 chiropractors and 12 support staff who continually collaborate on the latest treatment protocols and high quality patient management. Their doctors offer a combined total of over 60 years of chiropractic experience.

The goal at Backfit is to help patients reach their health potential and live pain free. The Backfit team is focused on providing education and coaching for patients so that they understand the value of prevention and maintaining spinal health over a lifetime. The clinic offers a combination of services including chiropractic adjustments, decompression and exercise therapy.

To learn more about Backfit visit: <http://www.backfit.ca/>



SAVE THE DATE

SAVE THE DATE

Canadian Chiropractic National Convention and Tradeshow

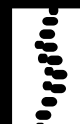
September 18-20, 2015

Scotiabank Convention Centre
Niagara Falls

Be sure to save the date for the CCA's National Convention and Tradeshow set to take place September 18-20, 2015 in Niagara Falls, Ontario.



Association
chiropratique
canadienne



Canadian
Chiropractic
Association

RECENT FUNDING AWARDS



Dr. Jason Busse, DC, PhD, has been awarded three prestigious CIHR operating grants. Dr. Busse is an Assistant Professor in the Department of Clinical Epidemiology & Biostatistics and the Department of Anesthesia at McMaster University. His areas of interest include Disability Management, Insurance Medicine, Evidence Based Health Care, Medically Unexplained Syndromes, Orthopedic Trauma and Research Methodology. He

has contributed to eight books and has 109 publications in peer-reviewed journals.

Patient-Centred Interprofessional Shared Care Model for Low Back Pain Management Principal Investigators: Guyatt, Gordon H; Busse, Jason W; Rampersaud, Raja Y **Awarded \$100,000 from the CIHR Institute of Musculoskeletal Health and Arthritis**

It is estimated that 50-80% of the adult population will experience low back pain (LBP) in their lifetime. Although generally acknowledged as having a favourable outcome, growing evidence suggests that LBP is a chronic remitting and relapsing condition for many.

Canadian patients with LBP who seek care are faced with a choice of healthcare and provider options, with little or no collaboration between providers, often leading to fragmented patient care. Treatment results for patients with non-specific LBP in general, when managed as a single group, are suboptimal. Current research suggests that a more specific approach to the management of LBP could lead to tailored treatments and improved outcomes. The Ontario Ministry of Health and Long Term Care has recently approved a pilot study to explore the effect of a shared care model using standardized assessment of LBP patients by allied health professionals (chiropractors and physiotherapists). This model requires a formal evaluation to inform relevant stakeholders whether the model should be abandoned, revised, or implemented across Ontario.

We propose to initiate two randomized controlled trials to establish if this patient-centred inter-professional shared care model for LBP is effective. One trial will recruit patients attending to primary care providers and the second trial will recruit patients referred to spine surgeons in Ontario. The primary outcome will be functional recovery; we will also capture quality of life, return to work, and complete cost-effectiveness analyses. We will look to build on the currently awarded funds to acquire sufficient resources to pursue our proposed trials.

FORESITE-VISION: Further Observation for Chronic Pain and Poor Functional Recovery Risk Factor Examination at the Home SITE, a study in partnership with the VISION Cardiac Surgery Prospective Cohort Study

Principal Investigators: McGillion, Michael H; Busse, Jason W **Awarded \$180,000 by the CIHR Institute of Circulatory and Respiratory Health**

Approximately 36,000 Canadians undergo cardiac surgery each year and previous research has found that as many as half of patients will develop chronic pain after surgery. Chronic pain after surgery is associated with reduced functioning and poor quality of life. The cost of this problem to patients and to society is not known. Our aim is to examine how pain related beliefs and gender based pain expectations can influence the development of chronic pain following cardiac surgery. This study will involve adult patients who undergo cardiac surgeries, such as coronary artery bypass grafting and heart valve repair, at the Hamilton General Hospital. We will collect data on people's pain related beliefs and gender based expectations about pain before they have surgery. We will follow up with participants at 6 months and 1 year after their surgery to collect information on chronic pain and economic data. This study will provide us with information regarding who is at risk for developing chronic pain and how we may help to prevent it..

Management of Chronic Neuropathic Pain Syndromes: A Network Meta-Analysis

Principal Investigators: Busse, Jason W; Guyatt, Gordon H **Awarded \$100,000 by the CIHR Institute of Health Services and Policy Research**

Chronic neuropathic pain (CNeP) occurs following injury or disease affecting the nervous system. Some potential causes of CNeP include spinal cord injury, stroke, and diabetes. Patients with CNeP experience lower health-related quality of life than the general population and this pain syndrome is associated with substantial socioeconomic burden. In the United States alone, almost \$40 billion in health care, disability and related costs are attributed to CNeP annually. The only Canadian survey conducted to date found an 18% prevalence of CNeP among 1,207 randomly selected individuals in Alberta, Canada. With an aging population and the associated increase in pre-disposing conditions, the prevalence of CNeP in Canada is projected to rise significantly. Current research on management of CNeP is limited as no review has looked at all interventional studies for CNeP, which limits attempts to make inferences regarding the relative effectiveness of treatments. We will explore all therapies for CNeP that have been tested in randomized controlled trials and use innovative statistical techniques to establish both which treatments are effective and, among these, which are more effective than others. Our review will provide comprehensive information to patients, clinicians, and payers that will be critical to guiding evidence-based management. Our proposed review will facilitate improved outcomes for patients with CNeP and identify key areas for future research.

Congratulations Dr. Busse!!

RECENT FUNDING AWARDS



Dr. Greg Kawchuk DC, PhD
University of Alberta

Award- Partnership for Research and Innovation in Health System (PRIHS) Award

Dr. Greg Kawchuk, DC, PhD is one of three PIs on a research team that has been awarded a very significant grant of \$750,000 in the September 2013 Partnership for Research and

Innovation in the Health System (PRIHS) competition in the Bone & Joint Health category.

The grant is titled "SpineAccess Alberta: An Innovative Health Service Delivery and Spine Management". The main objective of the grant is to introduce a new model of triage-based care for back problems (SpineAccess Alberta) that will use multidisciplinary teams to improve spine patients' navigation through the health system to match the right patients, with the right care, at the right time.

The PIs team leading the grant are:

Linda Woodhouse – University of Alberta

Greg Kawchuk – University of Alberta

Leah Phillips – Alberta Health Services

As background, "PRIHS is a partnership between Alberta Innovates – Health Solutions (AIHS) and Alberta Health Services (AHS) aimed at improving health outcomes for patients across Alberta. PRIHS supports Strategic Clinical Networks (SCNs) comprised of health researchers and clinical practitioners across the continuum of care working to identify sustainable solutions to improve quality of care and value for money in the health system."

Dr. Greg Kawchuk, DC, PhD is a professor at the University of Alberta and the **Canada Research Chair** in Spinal Function. His research interests focus on defining the mechanisms that initiate and sustain spinal disorders so that clinically relevant strategies can be developed toward their prevention or resolution. A major component of his research involves developing new technologies to assess spinal structure and function, then using those technologies to evaluate various clinical interventions. A suite of methodologies are being developed to assess spinal structure and function in both in vitro and in vivo settings. These methods utilize advancements in robotics, ultrasound, magnetic resonance imaging and kinematics. Using the methods developed in-house, Dr. Kawchuk is evaluating the mechanical and genetic responses of spinal tissues to various conditions (real or simulated) including therapeutic interventions. The performance of several methodologies developed in Dr. Kawchuk's team lab is now being evaluated in several human trials. He expects that some of these methods will be used to better diagnose spinal conditions or to evaluate various therapies.

Congratulations to Dr. Kawchuk!



Dr. Jill Hayden DC, PhD
Dalhousie University

Award- CIHR award \$94,448

Dr. Jill Hayden was recently awarded funding from the Canadian Institutes of Health Research (\$94,448) for a project that will explore the relationship between individual recovery expectations and outcome in adults experiencing low back pain. Her team will use a systematic

review of the research literature to identify all relevant studies that have been published, and will combine and compare information from them to draw conclusions. Since this is a new area of research, they will also explore the best ways to conduct this type of research synthesis, including different literature search strategies and testing a way to assess the quality of studies included in the review. This project is a Cochrane Collaboration Prognosis 'Exemplar' Review to assess the feasibility and provide examples of this innovative type of systematic review (Hayden JA, Tougas M, Iles R, Riley RD, Pincus T, Saunders R, Parker RM. Individual recovery expectations and prognosis of low back pain: Synthesis and implementation of prognostic factor evidence. CIHR Knowledge Synthesis Competition, 2013-2014.).

In addition, Dr. Hayden holds funding for a project that uses novel methods of meta-analysis to investigate characteristics of exercise therapy interventions that make them more (or less) effective, and identify characteristics of individual patients and/or treatment subgroups who would most benefit from specific exercise therapy interventions (Hayden JA, Riley RD, van Tulder MW, McGrath PJ, Harman K. Exercise therapy for patients with chronic LBP: Using novel methods of meta-analysis to inform effective management. NSHRF Establishment Grant Competition, 2012-2015). *This project includes the engagement of health decision-makers in the interpretation and application of evidence and understanding the factors that influence health decision-makers' use of evidence.*

Dr. Hayden also currently holds funding to conduct evidence summary projects and capacity building with decision-maker partners to increase health evidence application in NS policy decision-making (Hayden JA. Using research evidence to inform practice & policy. NSHRF Catalyst Award, 2012-2014).

Dr. Hayden is one of our profession's 30 DC, PhD's in active full-time research contributing high quality scientific evidence to address the societal burdens of health care! By "investing in people", like Dr. Jill Hayden, the profession can now address the evidence-driven basis of policy and decision makers in government and the private sector.

Congratulations to Dr. Hayden!

RECENT FUNDING AWARDS



Dr. Steven Passmore, DC, PhD
University of Manitoba
CCRF Professorship in
Spine Biomechanics and
Neurophysiology

Award #1- Manitoba Health
Research Council (MHRC)
Establishment Grant- \$83,000
Project- An exploration of spinal
manipulation dosage

The CCRF is delighted to announce that Dr. Passmore has been awarded the 2013-2014 Manitoba Health Research Council (MHRC) Establishment Grant of \$83,000 for the project entitled: ***"An exploration of spinal manipulation dosage"***.

Dr. Passmore holds the **"Canadian Chiropractic Research Foundation Professorship in Spine Biomechanics and Neurophysiology"** at the University of Manitoba where he is an Assistant Professor in the School of Medical Rehabilitation in the Faculty of Medicine. This CCRF Research Professorship is funded with an initial investment of over \$500,000 in a partnership between the CCRF, the University of Manitoba, Manitoba Health, the Manitoba Chiropractors' Association and the Canadian Chiropractic Association as part of the CCRF's research capacity building program which establishes Research Chairs and Professorships in universities across Canada.

Dr. Passmore operates a research program with three concurrent research tiers (Basic Science, Applied Clinical Science, and Clinical Intervention Studies) and has created an enriched laboratory environment to foster collaborative and interdisciplinary study. Two previous funding awards include the Manitoba Medical Service Foundation Research Grant of \$20,000 and a Workers Compensation Board of Manitoba research grant of \$199,167.

Award #2- WCD Research and Workplace Innovation Program (RWIP), \$195,000

Dr. Steven Passmore has been selected as one of the ten recipients of the Worker's Compensation Board of Manitoba (WCB), Research and Workplace Innovation Program (RWIP) Grant. This very significant award of \$195,000 brings together distinguished researchers from the University of Manitoba, Memorial University in Newfoundland and the Institute for Work & Health in Toronto. Collaborators include: Stephen Bornstein (PI), PhD, Emma Irvin (PI), PhD, Dwayne Van Eerd, PhD, Ron Saunders, PhD.

Project Title: "Synthesizing Occupational Health and Safety Knowledge for Local Stakeholders"

The Research and Workplace Innovation Program funds \$1 million every year to high-quality scientific research for projects aimed at reducing workplace injuries and improving workplace health and safety. Dr. Passmore and his team exemplify the benefits of collaboration which will lead to great advancements for the chiropractic research community and entire profession.

To read more about the WCB awards please visit:

www.wcb.mb.ca/wcb-awards-1-million-in-grants-for-workplace-health-and-safety-innovation-and-research

Congratulations to Dr. Passmore!



Dr. Martin Descarreaux, DC, PhD
Université du Québec à
Trois-Rivières

Award- Award for excellence **in research from UQTR**

Dr. Martin Descarreaux, DC, PhD has won the prestigious UQTR "Award for Excellence in Research". On March 20, 2014, a gala ceremony took place where Dr. Descarreaux was honoured with this award.

The Award for Research Excellence is the highest institutional recognition for excellence in research at the Université du Québec à Trois-Rivières, and receiving it brings tremendous recognition not only to his research efforts with the Chiropractic Research Chair, but also to the university-based chiropractic program and the profession in general.

Dr. Descarreaux currently holds the Chiropractic Research Chair FRCQ at UQTR (Chaire de Recherche en Chiropratique FRCQ) in the Département des Sciences de l'activité physique. He specializes in neuromuscular control of the spine and his research interests include the neurophysiologic effects of spinal manipulation. The characterization of the neurophysiological and biomechanical effects of spinal manipulations is upmost among the Chair's research themes.

Dr. Descarreaux is a most deserving researcher and this award properly acknowledges his tremendous contributions to date to the university, chiropractic profession and research community both across Canada and internationally.

Congratulations to Dr. Descarreaux!



Left to right:

Ms Nadia Ghazzali (UQTR Rectrice)

Dr. Martin Descarreaux (Chaire de Recherche en Chiropratique FRCQ)

Mr. Yves Tousignant (Président du conseil d'administration de l'UQTR)

Mr. Robert Mantha (UQTR Vice-Recteur recherche et développement)

DR. ANDRÉ BUSSIÈRES DC, PhD WINS CIHR AWARD

Dr. André Bussi res is part of a team of researchers from McGill University lead by Dr. Annette Majnemer who have been awarded \$330,574 in CIHR funding. Dr. Bussi res is an Assistant Professor at McGill University and holds the distinguished CCRF Professorship in Rehabilitation Epidemiology in the Faculty of Medicine.



Project title:	PROMPT Identification of Cerebral Palsy: Primary-care Referral Of Motor-impaired children: Physician Tools
Principal Investigator:	MAJNEMER, Annette
Co-Investigators:	BURKO, Benjamin; DAGENAIS, Emmanuelle; LEDUC, Denis G; SHILLER, Mitchell; AHMED, Sara; ANDERSEN, John C; BERGMAN, Howard; BUSSI�RES, Andr�; DAGENAIS, Lynn; DARSAKLIS, Vasiliki B; FEHLINGS, Darcy L; KIRTON, Christopher A; LI, Patricia T; RODRIGUEZ, Rosario; SHEVELL, Michael I; SHIKAKO THOMAS, Denise K; SNIDER, Laurie M; THIBAUT, Julie
Research Institution:	Montreal Children's Hospital Research Institute
Granting Agency:	CIHR Primary Institute: Human Development, Child and Youth Health
Funds Awarded:	\$330,574

Cerebral palsy (CP) is the most common physical disability of childhood, affecting approximately 50-60 thousand Canadians.

Pediatric professional societies and Canadian policies strongly endorse early identification of children with developmental disabilities, so that rehabilitation interventions and family support may begin without delay. Early detection of CP by primary care providers is problematic, and specific screening tools for cerebral palsy are lacking. Furthermore, primary care physicians do not typically refer these children to rehabilitation specialists for early interventions at the same time they are referring the child to medical specialists for diagnostic determination, further delaying timely therapeutic interventions. The PROMPT study proposes to address this gap in knowledge. First, we will identify the clinical attributes that are evident early in life that should prompt referral to specialists for diagnosis

and management. This will be achieved by review of existing evidence and by consensus methods involving specialists in the field. Then a team of health professionals, researchers and parents will develop user-friendly and informative tools for use by community-based primary care providers that will enhance their ability to identify cerebral palsy as early as possible and appropriately refer these young children to medical specialists and also to rehabilitation services. This study aims to improve detection of cerebral palsy early in life, so that children may benefit from early intensive therapeutic interventions that will optimize brain plasticity and functional potential, and parents may be provided with timely anticipatory guidance and resources that will enhance adaptive coping and caregiver health.

The Association of Chiropractic Colleges - Research Agenda Conference (ACC-RAC) Awards - March 21 – 22, 2014

The Association of Chiropractic Colleges-Research Agenda Conference (ACC-RAC) held its 21st meeting of the scientific, peer-reviewed presentation section on March 20-21, 2014 in Orlando, Florida. The ACC-RAC is the largest annual research-based chiropractic conference and, “provides a venue for discussion and presentation of ... shared educational, scholarly, and research-related needs of the chiropractic academic and research community”. This year’s theme was, “Aiming for effective change: Leadership in chiropractic education, research, and clinical practice”.

The Canadian delegates did exceptionally well at this year’s conference; not only did they take home four paper awards but one workshop was accepted into the conference for Friday’s plenary.

The following prize winning submissions for the 2014 conference were selected on the basis of quality, order of evidence, scientific foundation, format, and writing style. They have also been selected for submission to the *Journal of Manipulative and Physiological Therapeutics*.



Dr. Steven Passmore
University of Manitoba
(ACC-RAC)

The conference had more than 480 delegates from at least 5 continents (Asia, Australia, North & South America, and Europe). Dr. Passmore was fortunate enough to receive an outstanding paper award on behalf of his team for the project: Lumbar spinal stenosis and lower limb motor control: the impact

of walking induced strain on a performance-based outcome measure.

How do we measure whether our patients are getting better, worse, or remaining exactly the same in response to a course of care or the progression of a disease? Questionnaires are the typical measure used, but language barriers and psychological comorbidity may blur the interpretation of results.

Degenerative lumbar spinal stenosis (LSS) is the number one reason why people over 65 proceed to spine surgery. There is evidence that LSS can respond favourably to chiropractic care. One of the first complaints patients with LSS have is that they notice difficulty with standing and walking movements. The purpose of this research was to use established motor behaviour paradigms as outcome measures, and test them under strenuous conditions to measure a patient's ability to move.

This project was funded by a \$20,000 grant from the Manitoba Medical Services Foundation.

The paper was selected by the National Board of Chiropractic Examiners for the award who recommended it for submission to JMPT.

The Team:

Steven Passmore, Assistant Professor, CCRF Professorship, Faculty of Medicine, University of Manitoba; Michael Johnson, Orthopaedic Spine Surgeon, Faculty of Medicine, University of Manitoba;

Valerie Pelleck, Master of Science student, School of Medical Rehabilitation, Faculty of Medicine, University of Manitoba; Erica Ramos, undergraduate research assistant, Faculty of Kinesiology & Recreation Management, University of Manitoba; Yasmine Amad, undergraduate research assistant, Faculty of Kinesiology & Recreation Management, University of Manitoba; Cheryl Glazebrook, Assistant Professor, Faculty of Kinesiology & Recreation Management, University of Manitoba.

ABSTRACT:

Introduction: Activities of daily living create strain in degenerative lumbar spinal stenosis (LSS) patients, does treadmill walking? Replicating a recently established performance-based outcome measure, we explored strain in LSS patients.

Methods: LSS patients (N=16) and healthy controls (N=16) performed 2 blocks of great-toe pointing movements to a series of projected squares. Following block-one participants completed a 12-minute progressive exercise treadmill test (PETT). Pointing movements were analyzed using 3D motion analysis. Behavioural and kinematic measures evaluated performance. The Health Research Ethics Board approved all procedures.





Dr. Carlo Ammendolia DC, PhD
University of Toronto
(ACC-RAC)

Dr. Carlo Ammendolia picked up a \$1000 prize for his paper "Boot Camp for Lumbar Spinal Stenosis: A Retrospective Study." The paper describes a study looking at outcomes following the boot camp program used at Mt Sinai Hospital.

ABSTRACT

Introduction: Lumbar spinal stenosis is a leading cause of pain, disability, and loss of independence in older adults. The effectiveness of non-operative treatments for lumbar spinal stenosis is unknown. The Boot Camp for Lumbar Spinal Stenosis Program addresses the multi-faceted aspects of lumbar spinal stenosis. The purpose of this study was to assess the effectiveness of the Boot Camp Program.

Methods: This was a retrospective study. Two researchers independently extracted the data from the charts of consecutive eligible patients who completed the six week Boot Camp Program. A paired t-test was used to compare differences in outcomes from baseline to six week follow-up.

Results: a total of 49 patients were enrolled with a mean age of 70 years. The mean difference in the Oswestry Disability Index was 15.2, 95% CI (11.39, 18.92) and for the functional and symptoms scales of the Swiss Spinal Stenosis Questionnaire it was 0.41, 95% CI (0.26, 0.56) and 0.74, 95% CI (0.55, 0.93) respectively. Numeric pain scores for both leg and back both showed statistically significant improvements. Improvements in all outcomes were clinically important.

Conclusions: This study provided preliminary evidence of the effectiveness of the Boot Camp for Lumbar Spinal Stenosis Program.

Dr. Ammendolia currently holds the CCRF professorship in Spine and is an Assistant Professor at the Institute of Health Policy, Management & Evaluation in Faculty of Medicine at the University of Toronto. His primary research interests are in the conservative management of degenerative and inflammatory spinal disorders (DLSS). He also works to develop and implement workplace interventions to prevent disability and maximize worker health.



Dr. François Nougrou, PhD
Université du Québec
à Trois-Rivières
(ACC-RAC)

For a 4th year in a row, members of the Chiropractic Research Chair of the Université du Québec à Trois-Rivières left the Association of Chiropractic Colleges and Research Agenda Conference (ACC RAC) with one of the prizes awarded for

best submitted papers. The article, entitled "Biomechanical and physiological responses to spinal manipulations", was written by François Nougrou, Claude Dugas, Michel Loranger, Isabelle Pagé and Martin Descarreaux, and is the group's 6th paper to receive a prize at this conference. The article describes one of the team's innovative projects which is aimed at assessing, in humans, the vertebral unit biomechanical and physiological responses to a graded increase of preload forces.



Dr. Jessica Wong BSc, DC
University of Ontario Institute
of Technology
(UOIT) (ACC-RAC)

Dr. Jessica Wong won a paper award for the project titled: "Assessing the change in attitudes, knowledge, and perspectives of medical students to chiropractic after an educational intervention" Jessica Wong, Luciano Di Loreto, Alim Kara, Kavan Yu, Alicia Mattia, David Soave, Karen Weyman, Deborah Kopansky-Giles.

ABSTRACT

Objective: To assess the change in attitudes, knowledge, and perspectives of medical students to chiropractic after a one-hour educational intervention.

Methods: We used a mixed-methods approach with a 52-item cross-sectional paper survey and a focus group of third-year medical students. ANOVA and Wilcoxon rank-sum test were used to assess group differences before and after the educational intervention. Constant comparison method was used for thematic analysis.

Results: The survey was completed by 58 medical students (51.7% response rate) and the focus group consisted of six students. The following significantly increased after the educational session: self-reported understanding of chiropractic, number of attitude-positive responses, and average number of correct responses assessing knowledge on chiropractic. Qualitative themes were that medical students: 1) wanted exposure to chiropractic earlier in the formal curriculum and in clinical settings;

2) had negative attitudes towards chiropractic from hidden curriculum; and 3) wanted more information regarding evidence and safety of chiropractic.

Conclusion: Our results support the use of a one-hour educational session to improve medical students' views towards chiropractic. Educational reform should consider earlier exposures to chiropractic in the formal medical curriculum and in clinical settings that addresses evidence, safety, and hidden curriculum around chiropractic.

The results from this paper suggest that education on chiropractic is helpful in improving the attitudes and knowledge of medical students to chiropractic. The study also provides direction for developing effective educational sessions in the future. Overall, this may help promote future collaboration between physicians and chiropractors.

Dr. Jessica Wong completed her joint Bachelor of Science degree and health diploma in Medical Radiation Sciences from the University of Toronto and Michener Institute of Applied Health Sciences in 2006, followed by her Doctor of Chiropractic degree from CMCC in 2010. After graduating from CMCC, she completed the CMCC Graduate Clinical Sciences residency program. Currently she is a research associate in Dr. Pierre Côté's team for the development of the Minor Injury Treatment Protocol project at UOIT which is funded by the Ontario Ministry of Finance.

Chiropractic Practice:

Developing implementation interventions to improve the uptake of research into clinical practice.

Simon French
André Bussi res
Carlo Ammendolia
Silvano Mior
Michael Schneider

SUMMARY

The workshop aimed to provide an introduction and basic training for faculty and researchers interested in learning more about, or undertaking, knowledge translation research. In addition it provided the basic knowledge and skills to develop an implementation intervention designed to improve the uptake of evidence-based knowledge into routine practice

For more information about this year's ACC-RAC conference visit:

http://www.chirocolleges.org/pdfs_docs/ACC-RAC_2014_flier_schedule_summary.pdf



UPCOMING EVENTS

13th WFC Congress - Athens Greece May 13-16, 2015

The World Federation of Chiropractic is set to host its 13th Biennial Congress on May 13-16, 2015 in Athens Greece. The congress will incorporate the 2015 Annual Convention of the European Chiropractors' Union and will be hosted by the Hellenic Chiropractors' Association. This series of events will take place at the Athens Hilton Hotel and the Megaron Athens International Conference Centre in the historic city of Athens.

For more information visit

<https://www.wfc.org/congress2015/>



JCCA PUBLISHES SPECIAL ISSUE

The June 2014 issue of the Journal of the Canadian Chiropractic Association is a Special Issue on "Spine Neuromuscular Control".

Dr. Martin Descarreaux DC, PhD serves as the Guest Editor in his area of expertise. There are ten scholarly papers being published from world class researchers.

The JCCA is an international, peer-reviewed biomedical periodical with over 56 years of publication history. One of the most accessed and visible journals in the chiropractic profession the JCCA is indexed in PubMed, CINAHL, MANTIS, Index to Chiropractic Literature, and SPORTDiscus. The JCCA is renowned for its simple submission process, and expert international and multidisciplinary Editorial Board.

www.jcca-online.org



CALL FOR PAPERS

The *Journal of the Canadian Chiropractic Association (JCCA)* is an international, peer reviewed biomedical periodical with over 56 years of publication history. One of the most accessed and visible journals in the chiropractic profession, the JCCA is indexed in PubMed, CINAHL, MANTIS, AMED, Index to Chiropractic Literature, and SPORTDiscus.

The JCCA publishes original research papers, including observational and interventional studies, systematic reviews, case series, clinical practice guidelines, assessments of new clinical technologies, commentaries and editorials related to the diagnosis, management and prevention of neuromusculoskeletal disorders.

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UPDATE ON OCA FUNDED CCRF RESEARCH PROFESSORSHIPS



Canadian Chiropractic Research Foundation Professorship in Spine - University of Toronto

Dr. Carlo Ammendolia, DC, PhD

Dr. Ammendolia has been in chiropractic practice for over 30 years and now combines clinical practice and research in the area of non-surgical treatment of mechanical, degenerative, and inflammatory spinal disorders with a special interest in degenerative lumbar spinal stenosis. The award has provided Dr. Ammendolia with the opportunity to conduct clinical research that he believes is relevant to the chiropractic profession and the spine research community as a whole.

He currently lectures to CMCC interns, residents and undergraduate students. He also teaches and lectures the U of T rheumatology residents and clinical epidemiology graduate students, and in 2013 was able to use his very own clinic as an elective for the Family Practice Residents. Dr. Ammendolia is conducting two randomized clinical trials (RCTs) and testing various strategies to improve walking ability in lumbar spinal stenosis. He has completed development of a patient instructional workbook and video for lumbar spinal stenosis, as

well as an educational website (www.mybackcare.ca). His goal is to expand the approach to the management of ankylosing spondylitis, herniated disc and chronic neck and back pain by designing and testing self-management programs. Ultimately, the goal of Dr. Ammendolia's research is to reduce the risk of disability among individuals with degenerative, mechanical and inflammatory back pain.

Dr. Ammendolia is currently involved in eight different projects, six of which he is the principal investigator plus two others as a co-investigator. He has had two major publications in the last couple years and a third submitted to the Spine Journal in March 2013. He was also invited to give seven presentations in the last two years, including one at the Canadian Spine Society 13th Annual Scientific Conference in Quebec in March 2013. Most recently he was awarded a significant strategic operating grant from the Arthritis Society for \$359,958 for 2013/2014. Dr. Ammendolia was also awarded Researcher of the Year in 2013 by the Ontario Chiropractic Association.



Canadian Chiropractic Research Foundation Professorship in Disc Biology - University of Toronto

Dr. W. Mark Erwin, DC, PhD

In March 2012, Dr. Erwin received his own independent laboratory at Toronto Western Hospital. This is the first and only cellular/molecular biology disc-biology research laboratory in Canada and is the only one in the world where the Principal Investigator

is a DC, PhD. Dr. Erwin's research programme concerns a restorative/regenerative theme that initially started with the study of the restorative capacity of notochordal cells. They have now published 22 major scientific manuscripts, with another currently under review and three more in preparation.

His laboratory has received (June 2013) a \$1 million USD operating grant and two grants for \$125K in 2013 for a total of \$1.25 million of grant support for 2013. There is also a CIHR grant application in preparation for the March 2014 competition. In addition to peer-reviewed funding, Dr. Erwin has received significant Foundation related funding including a recent grant studying the ability to neurodifferentiate intervertebral disc-derived stem cells into motoneurons as a potential treatment for Amyotrophic Lateral Sclerosis (ALS or Lou Gehrig's disease) in collaboration with Sunnybrook Health Sciences Centre (neurology) and a Canada Research Chair in neurodegenerative disease at the University of Toronto. He has also received significant Foundation support to further his notochordal and stem cell-cell derived therapeutic strategy to treat degenerative disc disease (DDD).

He continues to provide seminars within the divisions of orthopaedic as well as neurosurgery for residents and fellows within these specialty programmes and has again provided the cellular and molecular biology of joint disorders talk for the Canadian Orthopaedic Association Basic Science Course in Toronto (August 2012, 2013). He has given podium presentations and poster presentations at numerous international peer-reviewed meetings over the past year including being an invited speaker at the "East meets West" Chinese Orthopaedic Association meeting, Shenzhen, China (March 2013). He was an invited speaker at the American Association of Orthopaedic Medicine meeting in Denver (August 2013) where he spoke about the future of biologic therapy for spine-related disorders. He also provides various lectures/seminars to CMCC students in physiology and chiropractic practice courses.

He is also working to establish a combined Chiropractic Clinical Sciences Fellowship/MSc degree at the University of Toronto. This will not be a joint CMCC/U of T degree, but once implemented will provide an entirely new level of integration of the post-graduate chiropractic fellowship combined with a graduate U of T degree. The experience will provide significant clinical interaction

within the spine and rheumatology programmes at Toronto Western Hospital in addition to the student's MSc work within his laboratory. Dr. Erwin has mentored several CMCC summer students in his laboratory and has two such students already accepted for the summer of 2014. In the autumn of 2014, he will have his first DC/MSc student beginning her graduate programme in his laboratory. Finally, Dr Erwin has developed a robust collaboration with a former orthopaedic spine surgeon research fellow who is a staff surgeon at the University of Basel, Switzerland (Dr. Arne Mehrkens). This collaboration is with respect to notochordal cell-based intervertebral disc and cartilage rescue. The University of Basel will be sending another surgeon to spend a 3-month research fellowship in Dr. Erwin's laboratory this coming May-June 2014.

He is beginning his second term as a member of the North American Spine Society Biologics committee, and continues his work on the AOSpine Research Network and is a committee member with the UHN Animal Care and Human Tissue Biobanking committees. Most recently (November 2013) he was awarded the CCA Medal of Merit at the CCA Chair Affair for his tremendous work in the chiropractic field and was inducted to the Sports Hall of Fame at York University.



Canadian Chiropractic Research Foundation Professorship in Spine Mechanics and Human Neurophysiology University of Guelph

Dr. John Srbely, DC, PhD

Dr. Srbely's research interests lie in the areas of mechanisms of pain/chronic myofascial pain, therapeutic management of pain and pain quantification. He aims to elucidate

the mechanisms of chronic myofascial pain and advance conservative/non-invasive methods to treatment/management. A core concept in his research is the role central sensitization plays in the clinical manifestation of chronic myofascial pain and how we can treat this conservatively using spinal manipulative therapy (SMT), ultrasound and dry needling techniques. Dr. Srbely has received funding from the Canadian Arthritis Network (CAN) to conduct his research and is also a Network Investigator for CAN. He has had several publications in journals such as the Journal of Pain, the Journal of Rehabilitative Medicine and the Journal of the Canadian Chiropractic Association. He was recently (September 2013) hired for a full time tenure track position at the University of Guelph and will be heading up the Centre for Chronic Pain at the university. Dr. Srbely hopes his research will allow him to develop novel/enhance existing treatment approaches in clinical pain management and musculoskeletal biomechanics/pathomechanics associated with chronic diseases and aging.

UPDATE ON OCA FUNDED CCRF RESEARCH PROFESSORSHIPS



New CCRF Research Professorship in Rehabilitation Therapy – Queen's University:

Dr. Simon French BAppSc(Chiropractic), MPH, PhD

In September 2013, Dr. Simon French BAppSc(Chiropractic), MPH, PhD was awarded the CCRF Professorship in Rehabilitation Therapy. The position is held within the School of Rehabilitation Therapy, Faculty of Health Sciences, Queen's University in Kingston, Ontario. Dr. French also has a cross appointment with the Department of Public Health Sciences at Queen's University.

Dr. French graduated from RMIT University as a chiropractor in 1993, received his Master of Public Health in 1999 from the Department of Epidemiology and Preventive Medicine, Monash University, and his PhD in 2009 from the School of Public Health and Preventive Medicine, Monash University. His PhD thesis was entitled: "Developing and testing complex interventions for improving the use of evidence in clinical practice: a case study of the management of acute low-back pain in general practice". His current research interests lie in knowledge translation

research in primary care with a focus on the management of musculoskeletal conditions and conducting randomized trials and systematic reviews.

Dr. French holds significant competitive research funding (over AUD \$2 million) and is well published in the scholarly scientific peer reviewed literature with over 50 publications to date. He is a sought-after invited speaker to professional conferences and has received many accolades and awards. Dr. French is the current Secretary/Treasurer of the Chiropractic and Osteopathic College of Australasia Research Limited, a newly established research funding body, and an Associate Editor of the open access journal Chiropractic & Manual Therapies. He also sits on the Knowledge Translation and Exchange Committee for the Canadian Chiropractic Clinical Practice Guidelines Initiative.

In his new position Dr. French is actively seeking research funding, including a grant submission to the Ontario Ministry of Health and Long-Term Care in November 2013, and another large research grant in preparation to be submitted in the March CIHR Open Operating Grant Scheme. Both of these grants are related to improving management of musculoskeletal conditions and therefore have relevance for the Canadian chiropractic profession

CANADIAN CHIROPRACTIC CAPACITY SURVEY

Canadian Chiropractic Capacity Survey - June 2014

Has the chiropractic research capacity grown in the last 6 years?

Over the last five years the chiropractic research capacity has grown enormously. There have been several new CCRF Research Professorships established at various universities across Canada, in addition to the twelve that are already underway. However, the good news is that universities are now approaching the CCRF to make these professorships a reality, whereas when the program first started, the pioneer, Dr. Gotlib went knocking at their doors. Clearly times have changed, and now roughly 20 new PhD students are about to graduate and join the pool of full time researchers.

In light of this growth it is time to take stock again and quantify exactly how much progress chiropractic researchers have made over the last 6 years. In the summer of 2014 a new survey will be circulated to all chiropractors in Canada to ascertain the real rate of growth in chiropractic research.

Look out for this survey in June 2014 so you too can help forge the road to building a stronger chiropractic profession!

CCRF MEMBERSHIP CAMPAIGN MESSAGE



The chiropractic profession has grown sharply in the past decade. We now number more than 7,000 in Canada. With a large number of students poised to enter practice in Canada over the next few years, this number will certainly grow. This growth raises the profile of chiropractic and allows us to help improve the health of more Canadians, but there are pitfalls. One of the casualties of this rapid growth is the loss of a sense of community. We are no longer a small family brought together by unique challenges. As a result, more of us are working in isolation. In the past, we have been able to rally together as a group when faced with an issue. Today, that issue is the future direction of chiropractic. Despite the good work being done in chiropractic clinics from Victoria to St. Johns, we practitioners are not keeping pace with changes in the health care system. And frankly, it is not our job to do so. Our task is to continue to provide high quality chiropractic care. We are very fortunate to have a group of chiropractors who are leading the way with research being performed at the best universities in Canada. The work being done by these chiropractors, our university based research chairs, is producing results which will help to establish us as the spine care experts. All that is required is for you to help by becoming a CCRF member. Go to www.canadahelps.org to renew your membership. Enter "Canadian Chiropractic Research Foundation" in the search box. You will receive an immediate tax receipt. This may be the most significant contribution you can make to the profession. Do it now.

Dr. David Leprich, DC
Chair, Fundraising
Chair, Membership Campaign

MESSAGE FROM CHAIR



Now that you have read through the 24th Chiropractic Research Bulletin, go back through our archives to the first bulletin, published March 12, 1998, and you will gain an appreciation of just how far we have advanced over these last sixteen years. The achievements have been truly significant, if not amazing!

The accomplishments of our researchers are not only being recognized here in Canada, but also internationally, bringing credibility to our profession, improved and validated strategies to use in our daily practices and thereby bringing enhancements to the lives and health of our patients. Today's society is demanding evidence based care and our researchers are helping you, the practitioner, to do just that. Through their quality of work, done in co-operation and collaboration with other world class researchers they are helping to position this profession as the leading experts in the assessment, diagnosis and treatment of neuromusculoskeletal disorders.

Our research chair program has been recognized for its innovation and achievements, so much so that other jurisdictions, from around the world, are inquiring how they too can emulate our formula for success. It speaks to the vision, dedication and determination of all those people who have served on the CCRF (and CFSR) Board, beginning back in 1976 through to the present. We owe a debt of gratitude to Dr. Allan Gotlib who has worked tirelessly to see our vision through to the reality that is today. His Order of Canada is recognition of that achievement.

Each and everyone of us has benefited from the work of our researchers, and so, if you have not already done so, why don't you take the time and join the CCRF today to help further Chiropractic Research and grow this great profession. Go to www.canadahelps.org and follow the links, it's in the profession's best interest.

Dr. Christopher L. Martin, DC
Chair, CCRF

CCRF MEMBERSHIP OPPORTUNITIES

HELP US REACH OUR GOALS!

In 2014, the Research Foundation will see up to 2 more university-based Chiropractic Research Chairs/Professorships become available. Each Chair/Professorship requires a minimum of \$500,000, so please be generous.

Each Foundation member will receive a tax receipt for full donation amount, the Chiropractic Research Newsletter, a listing in the Newsletter if you wish, and a Membership Certificate for your office.

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- Less than 1% of chiropractors in Canada are actively engaged in research.
- Chiropractic researchers in Canada are substantially under-funded.
- Many chiropractic researchers and graduate students are solely self-funded.
- There is an urgent need to continue to build chiropractic research capacity.

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