

Canadian Chiropractic Research Bulletin #9



Dr. Chris Martin DC
Chair, CCA Research Committee

The CCA Research Committee

Dr. Chris Martin (BC) - Chair
Dr. Rob Allaby (NB)
Dr. Eric Jackson (ON)
Dr. Deb Kopansky-Giles (ON)
Dr. Mark Labrecque (SK)

The CCA Mission Statement

The Mission of The Canadian Chiropractic Association is to help Canadians live healthier lives by:

- informing the public of the benefits of Chiropractic,
- promoting the integration of Chiropractic into the health care system,
- facilitating chiropractic research.

“The CCA can be proud of the successes we have had in the area of research. We have already met and continue to meet the objectives of The CCA Mission Statement.

Our Mission Statement also nicely dovetails with the mandate of the CIHR. Their integrative health approach has been a key to our successes, now and into the future, and ensures that Canadians reap the benefits of health research.

Much of the credit for the success of our research endeavors must be given to Dr. Allan Gotlib for his tireless efforts to promote and integrate chiropractic research into the mainstream of health research. He has, in many cases, single handedly developed invaluable relationships that have allowed our profession to move forward into areas where we have been unable to reach into in the past. In particular, our relationship with CIHR is a key example. We have two research chairs now, with the recent naming of Dr. Erwin at the University of Toronto, and now we are making further inroads with the nomination of Dr. Greg Kawchuk for a Canada Research Chair at the University of Alberta, again a first for the profession.

These are exciting times for the profession and our continued efforts will, in my opinion, ultimately lead to our full integration into the health care system where we rightfully belong. We can be proud of our successes and we should look forward with great expectation to an even brighter future, when each province will have a Chiropractic Research Chair at a major university.

I would like to acknowledge the OCA for their forward thinking in co-sponsoring

our second research chair awarded to Dr. Mark Erwin at the University of Toronto. If each province had the same foresight and ability as Ontario I'm sure we would realize our dream of fully integrating our profession into the health research community. I would also like to recognize those provinces that have contributed funds to research, either through assessment of dues, or from strongly promoting funding through voluntary contributions."

As Committee Chair, I would like to acknowledge the very significant roles played by both The CCA and the Canadian Chiropractic Research Foundation (CCRF). From fostering relationships with government funding agencies, to establishing university-based Chiropractic Research Chairs, to building chiropractic research capacity, Canadians derive tremendous benefit from our new knowledge being transferred into the health care system. Both Boards have made an exemplary commitment to improving the health of Canadians.

THE PROFESSION'S UNIVERSITY-BASED CHIROPRACTIC RESEARCH CHAIRS

Dr. Greg Kawchuk DC, PhD, Canada's 1st university-based Chiropractic Research Chair has been *nominated* for a "Canada Research Chair" at the University of Alberta in Edmonton (kawchuk@ucalgary.ca) and we are anxiously awaiting the competition results.

Dr. Mark Erwin DC, PhD is our 2nd university-based Chiropractic Research Chair. The *Ontario Chiropractic*

Association has provided true leadership and stewardship in funding this 4 year CIHR/CCRF partnered award and the entire OCA Board of Directors is to be commended. Building our intellectual research capacity and integrating our researchers into the conventional university system will mobilize interdisciplinary research and clearly ensure our future. Dr. Erwin's award is funded by the Ontario Chiropractic Association, the Canadian Chiropractic Research Foundation, and the Canadian Institutes of Health Research and represents a \$300,000 investment in chiropractic research.

Both the CCA and the CCRF continue to explore all possible opportunities for creating additional university-based Chiropractic Research Chairs.

Our strategies of building *relationships* with federal granting agencies, universities, and research organizations, advances our integration into Canada's health care system. We have "*invested in people*". University-based research is consistent with both The CCA Mission Statement and our new Vision.

Each Research Chair position requires approximately \$300,000 *initially* and if you are in a position to contribute financially and make a difference, please contact Dr. Allan Gotlib. Clearly, there are compelling reasons to support this vital initiative.

SYMPOSIUM UPDATE

On the September 18, 2004 in Montreal, we are holding our 4th *world class* scientific Research Symposium with speakers such as Dr. Cy Frank, IMHA Scientific Director (University of

Calgary) and of course Dr. Kawchuk and Dr. Erwin, in addition to our growing number of excellent chiropractic researchers. Contact Dr. Allan Gotlib at algotlib@ccachiro.org

CCA AWARDS

CCA Young Investigator Award

At our Research Symposium, we will be presenting the CCA Young Investigators Award. The goals of this Award are:

- a. to recognize outstanding research on chiropractic topics,
- b. to attract chiropractors and other scientists to study chiropractic research topics, and
- c. to advance the discipline of chiropractic

The \$1,000 award is given for original non-published research and the candidate cannot be more than three years after their DC, MSc or PhD degrees. The winning paper is selected from the eligible submitted abstracts by a Scientific Advisory Panel and will be presented at the Symposium.

For further information contact: Contact: Dr. Jean Boucher PhD, FACSM, Université du Québec à Montréal boucher.jean_p@uqam.ca or Dr. Allan Gotlib DC, Canadian Chiropractic Association algotlib@ccachiro.org

CCA Career Award

The goal of this award is to recognize outstanding contributions to research on chiropractic topics and to advance the discipline of chiropractic. Eligible

individuals will have contributed substantially during their professional career to chiropractic research topics as:

- a.) researchers, or as
- b.) facilitators of chiropractic research.

This is a career award given to both chiropractors and non-chiropractors. Those not eligible include members of the CCA Research Committee, CCRF Board and CCA Board. The Chair of the CCA Research Committee invites nominations which must include:

- a letter of nomination outlining the specific contribution,
- a short CV of the nominee, and
- a letter from the nominee stating that he/she is prepared to accept the award at the CCA Annual Meeting.

Please forward nominations by September 9, 2004 to:

Dr. Chris Martin, DC
Chair, CCA Research Committee
Canadian Chiropractic Association
1396 Eglinton Avenue West
Toronto, Ontario M6C 2E4
Email: clmchiro@telus.net

CCA RESEARCH AGENDA UPDATE

The CCA Research Agenda document continues to be refined by the members of the Consortium of Canadian Chiropractic Research Centers

This project was funded by four CIHR Institutes:

Institute of Musculoskeletal Health and Arthritis (IMHA)
Institute of Aging (IA)
Institute of Neuroscience, Mental Health and Addiction (INMHA) and
Institute of Population and Public Health (IPPH)

Participants have included over 50 clinicians and researchers and included Dr. Cy Frank, IMHA Scientific Director (University of Calgary) and Dr. Elizabeth Badley, IMHA Advisory Board (University of Toronto). The CCA Research Committee consulted with the CCA membership at large to provide a comprehensive opportunity for all of our members to participate in setting the Association's final research agenda for the next ten year period. The final recommendations should be presented to the CCA board in November.

COCHRANE COLLABORATION UPDATE

Dr. Allan Gotlib, JCCA Editor and CCA Director, Research Programs, is a member of the Executive Committee of the Canadian Cochrane Network and Center (CCN/C). Recently, the CCN/C Annual Report for 2003 graciously acknowledged the chiropractic profession for its participation in the Canadian Cochrane Network. (www.cochrane.mcmaster.ca).

“The Canadian Cochrane Network and Centre (CCN/C) gratefully acknowledges the financial support of the Canadian Institutes of Health Research. We also want to recognize the funding provided to the Centre by six of the Chiropractic Organizations in Canada: British Columbia College of Chiropractors, Canadian Chiropractic Association, Canadian Chiropractic Examining Board, Canadian Chiropractic Protective Association, Canadian Chiropractic Research Foundation, and the College of Chiropractors of Ontario. In addition, the Director, Co-Director and staff of

the Canadian Cochrane Centre sincerely appreciate the many people who have contributed their time and energy to the accomplishments of the CCN/C over the past year. Without their commitment and perseverance, the achievements documented in this report would not have been possible.”

NEW PhD AWARDS

Dr. Jean-Sebastien Blouin DC, PhD
Université Laval
jsblouin@kin.msp.ulaval.ca

Dr. Martin Descarreaux DC, PhD
Université Laval
Martin_Descarreaux@UQTR.ca

Dr. Mark Erwin DC, PhD
University of Toronto
Mark.Erwin@utoronto.ca

Dr. Howard Vernon DC, PhD
University of Glamorgan
hvernon@cmcc.ca

Congratulations!!

NEW MASTERS AWARDS

Dr. Ted Crowther DC, MSc has completed a Masters of Science in Health Services Administration from D'Youville College in Buffalo New York and is commencing a doctorate (Ed.D) in Health Policy in September. t.crowther@sympatico.ca

Congratulations!!

RECENT AWARD RECIPIENTS

Dr. Jean-Sébastien Blouin, DC, PhD,
CIHR Fellowship award
jsblouin@kin.msp.ulaval.ca

Dr. Blouin's research will take place at the University of British Columbia and is titled "Neuromuscular control of the head and neck in whiplash injuries". He additionally has been awarded a post-doctoral fellowship from the Michael Smith Foundation for Health Research. Congratulations!

Dr. Jill Hayden DC
CIHR Fellowship Award
University of Toronto
jhayden@iwh.on.ca

Dr. Hayden, in addition to a 2nd CIHR Fellowship has also been awarded the Maureen Dixon Award which recognizes a student who is "most likely to make an outstanding contribution to a community based agency" and also the Claire Bombardier Award which is given to the Clinical Epidemiology student deemed most outstanding in the program. Dr. Hayden will be a presenter at the upcoming Cochrane Colloquium in October. Congratulations!!

Dr. Gabrielle van der Velde DC
CIHR Fellowship
University of Toronto
gabrielle.vandervelde@utoronto.ca

This 2nd CIHR Fellowship provides support for the purpose of completing a PhD in Clinical Epidemiology. Her fellowship is only one of 64 awards from 317 applications received (a 20% success rate). Congratulations!! Her research entitled "Appropriate

management of neck pain: Contribution of decision analysis to the development of treatment recommendations is being undertaken at the Institute for Work and Health in Toronto and the University of Toronto, Department of Health Policy, Management and Evaluation.

Dr. Karine Boily DC, MBA
l'Institut de Recherche en Santé et Sécurité au Travail Fellowship
Université Laval
kboily@yahoo.com

Dr. Boily has been awarded a 3 year Doctoral Fellowship from l'Institut de Recherche en Santé et Sécurité au Travail and is a PhD candidate in epidemiology at the Université Laval. Her supervisor is Dr Chantal Brisson, a director of the GIROST and her project is evaluating the impact of a prevention programme on musculoskeletal disorders which have been implemented in a public workplace in Quebec city. The aim of this programme is to improve the psychosocial constraints of the work environment taking also into account the biomechanical aspects of the work. A second project is examining the incidence of fibromyalgia syndrome in a cohort of 9000 workers. Congratulations!!

GRANTS

Dr. Pierre Côté DC, PhD has been awarded a CIHR grant to test a model of recovery for MSK disorders. His co-investigators are: Cassidy JD, Beaton D, Carroll L, Hogg-Johnson S, Bombardier C. The Relationship between impairment, activity limitations, participation restriction and markers of recovery in individuals with

musculoskeletal disorders: A validation study of two conceptual frameworks. CIHR; Strategic Initiative "Advancing Theories, Frameworks, Methods and Measurements in Health Services & Policy Health Research and Knowledge Translation." 2002-2006. \$74,480. Congratulations!

Also, Dr. Côté has been asked to sit on the CIHR Allied Health professional panel for post-docs and New Investigators. The panel is chaired by Gillian Hawker (rheumatologist at UHN and head of the clinical epidemiology program at U of T) and includes nurses, pharmacists, occupational therapist and physiotherapists. Congratulations again! PCote@iwh.on.ca

BRIEF UPDATES ON SELECTED RESEARCH PROJECTS

Dr. Greg Lehman

We are continuing a series of studies which look at the influence of weight training modifications, viscoelastic creep and labile surfaces on trunk muscle coactivity and muscle onset of the transverse abdominis. Numerous studies have documented altered firing patterns in the knee (VMO vs. VL onset time), the shoulder (trapezius vs. serratus anterior onset) and the trunk (Erector Spinae and Transverse Abdominis latency). Using established biomechanical protocols we will determine if treatment can influence these muscle onsets.

Dr. Mark Erwin

Dr. Erwin will continue to explore soluble factors produced by notochord cells and their effect upon chondrocyte matrix synthesis during his post doctoral fellowship with Drs. Jane Aubin

(University of Toronto) and Robert Inman (Toronto Western Hospital). Dr. Erwin is pleased to have the support of the Canadian Arthritis Network through a "special project" grant as well as the CIHR-CCA Chair in Chiropractic Research. At present Dr. Erwin is evaluating gene expression and cytokine interaction with intervertebral disc-derived chondrocytes and is developing collaborative work with other institutions both in Canada and the USA.

Dr. Luke Boudreau

The Chiropractor military pilot project has been joined by Dr. Jason Busse MSc, DC, PhD (candidate) at McMaster University, Department of Epidemiology and will be submitting to the Canadian Journal of Public Health shortly.

Dr. Paul Bishop

Bishop, along with co-investigators Fisher C, Thomas K, Dvorak M, and Wing P are studying a prospective cohort comparing the outcomes (HRQOL) of operative management with nonsurgical treatments for patients with sciatica secondary to lumbar disc protrusion. The project is centered at the Combined Neurosurgical and Orthopaedic Spine Program (CNOSP), Department of Orthopaedics, University of B.C., Vancouver Hospital & Health Sciences Centre.

Dr. Walter Herzog

We are reporting on two current studies:
1. Head motion during neck manipulation: The purpose of this study is to quantify the movement of the head and neck relative to the shoulders during neck manipulation while simultaneously measuring the forces exerted on the neck by the chiropractor. The motion analysis procedures are fully three-dimensional

and should provide further data on the head movement during neck SMT.

2. Micro injuries to the vertebral artery from repeat neck manipulations: The purpose of this study is to investigate whether repeated strains of magnitudes observed in situ during neck manipulations cause micro damage to the arterial wall. Vertebral artery specimens will be harvested from human specimens and will be divided on each level into a control, test, and positive test specimen. The control specimen will undergo 1000 repeat stretches from -6-0% strain, the test specimen from 0-6% strain and the positive test specimen from 0-30% strain. This study will provide novel information whether 1000 repeat stretches of the vertebral artery to levels found in situ during neck manipulation (6%) causes micro damage to the vertebral artery.

Dr. Kent Stuber

Dr. Kent Stuber DC and Dr. Andrea Kenny ND are studying the effect of acupuncture on hamstring flexibility in a before-and-after trial. There are numerous interventions believed to have an effect on muscular flexibility and potentially on athletic performance-ranging from active interventions (stretching and/or strengthening of musculature) to more passive ones (manipulative therapy, massage therapy, spray-and-stretch, PNF, Active Release Techniques (R), and heat). This single case before-and-after trial looks at the effect of acupuncture treatment on a patient with a complaint of chronically tight hamstring muscles. The flexibility of the patient's hamstrings will be assessed using a goniometer and the 90-90 Straight Leg Raising Test. Measurements of hamstring flexibility

are to be taken before and after each of five treatments, as well as at one week and one month follow-up appointments.

Dr. Jill Hayden

Current projects include:

1. Thesis project: Development of a comprehensive conceptual model to understand the prognosis and course of low back pain. (Thesis committee: Bombardier, Hogg-Johnson, Tomlinson, van Tulder).

2. Exercise therapy for low back pain: This systematic review was recently completed and has been submitted for publication in the Cochrane library and a peer reviewed journal. This project includes a meta-analysis of randomized controlled trials assessing the effectiveness of exercise therapy in acute, subacute and chronic LBP, and also a Bayesian meta-regression analysis assessing the best exercise intervention strategies in chronic LBP. This project will be presented at the upcoming LBP International Primary Care Forum in Calgary, October 2004 (Hayden, vanTulder, Tomlinson, Malmivaara, Koes)

3. Systematic review methods: A number of ongoing projects investigate best methods in systematic review and meta-analysis, including:

a. Involving clinical stakeholders in the systematic review process - to be presented as a workshop at the upcoming Cochrane Colloquium in Ottawa, October 2004 (Hayden, Reardon, Pennick)

b. Bayesian statistical methods in meta-analysis - to be presented as a workshop at the upcoming Cochrane Colloquium in Ottawa, October 2004 (Hayden, Tomlinson)

Dr. Jason Busse

Current new projects include:

1. Readers of randomized controlled trials (RCTs) and researchers conducting systematic reviews commonly assume what was not reported in an RCT did not occur. We recorded the reporting of concealment of randomization and the blinding of trial participants, health care providers, data collectors, outcome assessors, and data analysts in 105 RCTs published subsequent to the “Consolidated Standards of Reporting Trials”. We successfully contacted and obtained data from the authors of 98 of the 105 RCTs (participation rate 93%). In direct contact, authors frequently reported concealing randomization 96% (95% CI 87-100%), blinding participants 20% (95% CI 7-41%), blinding health care providers 65% (95% CI 52-77%), blinding data collectors 65% (95% CI 53-75%), blinding outcome assessors 79% (95% CI 69-87%), and blinding data analysts 50% (95% CI 40-60%) despite not reporting use of these methodological safeguards in their publications. Co-investigators were Devereaux , Choi , El-Dika , Bhandari, Montori , Schünemann, Garg , Heels-Ansdell, Ghali, Manns, and Guyatt. This study has been accepted for publication in the **Journal of Clinical Epidemiology**.

j.busse@utoronto.ca

2. Randomized controlled trials are acknowledged as the gold standard to establish treatment efficacy, and surgical therapies are increasingly being evaluated with this study design. Not all surgical therapies are amenable to investigation with randomized controlled trials, and in cases where this design is appropriate there are different trial designs to be considered. We presented

an overview of the use of randomized controlled trials in surgery, with a focus on trial design and on some of the challenges inherent to evaluating surgical therapies with randomized controlled trials. Co-investigators were Bhandari and Schemitsch. This study has been accepted for publication in **Techniques in Orthopaedics**.

3. Premenstrual syndrome (PMS) is a medically-unexplained disorder that presents with behavioural and somatic symptoms during the luteal phase of the menstrual cycle. We conducted a systematic review and meta-analysis of randomized controlled trials to determine the effect of psychological intervention on PMS. Psychological intervention proved more effective than control in reducing interference of premenstrual syndrome symptoms with activities of daily living (effect size = -1.10, 95% confidence interval, -1.81 to -0.39), improving sexual relationship (-0.65, -1.21 to -0.10), and reducing the impact of water retention and edema (-0.50, -1.01 to 0.00). Psychological intervention failed to show statistically significant effects on depression and anxiety. However, pre-specified subgroup analyses suggested that cognitive behavioural therapy significantly reduce both anxiety (-0.58, -1.15 to -0.01), and depression (-0.55, -1.15 to -0.05). Co-investigators were Montori, Krasnik, and Guyatt. This study has been submitted for publication.

4. Use of complementary and alternative medicine, including natural product use, is substantial in North America; however, many patients are unwilling to discuss use of such products with their family physician and it remains uncertain which factors are predicative

of such disclosure. An 18-item survey about healthcare usage and communication was distributed to patients presenting to the Canadian College of Naturopathic Medicine in March, 2003. The majority of respondents made use of natural products (92.5%; 161 of 174), and many (43.4%) reported that they did not discuss natural product use with their family physician. Most respondents indicated that their family physician did not ask about natural product use (71.9%). The most significant factor predictive of patients having discussed natural product use with their family physician was having their family physician ask about natural product use (OR=18.77; 95% CI=5.06 – 69.62). Other predictive factors were older age (odds ratio [OR]=1.06; 95% confidence interval [CI]=1.02 – 1.10), and female gender (OR=3.79; 95% CI=1.20 – 11.99). Co-investigators were Heaton, Wu, Wilson, and Mills. This study has been submitted for publication.

5. Peri-prosthetic bone loss is common following total joint arthroplasty and may threaten the survival of the implant. To determine the effect of bisphosphonates on peri-prosthetic bone mineral density (BMD, g/cm^2) after total joint arthroplasty we conducted a systematic review and meta-analysis of randomized controlled trials. Significantly less peri-prosthetic bone loss occurred in the bisphosphonate-treated patients compared to the control patients at 3 months [weighted mean difference (WMD): 3.3, 95% confidence interval (CI): 1.9-4.7, $p<0.01$], 6 month (WMD: 4.5, 95% CI: 1.6-7.4, $p<0.001$), and 12 months (WMD: 4.2, 95% CI: 1.5-6.9, $p=0.03$). Sensitivity analyses revealed greater maintenance of BMD in

cemented arthroplasty (WMD: 7.5, 95% CI: 4.3-10.7) than uncemented arthroplasty (WMD=2.1, CI: 0.61-3.6) at 1 year ($p<0.01$). The effect was also greater in total knee arthroplasty (WMD: 14.0, 95% CI: 6.3-21.7) than total hip arthroplasty (WMD: 2.5, 95% CI: 0.96-4.1) at 6 months ($p<0.01$). Co-investigators were Bhandari, Bajammal, Guyatt, Griffith, Schünemann, and Einhorn. This study has been submitted for publication.

6. In the last two decades, as medical care has improved, death rates for conditions such as myocardial infarction have dropped. While welcome for patients, low event rates provide challenges for clinical investigators who now require enormous sample sizes to test the incremental benefits of new therapies. In the last decade, clinical trialists have increasingly responded to this problem by using the number of patients experiencing any one of several adverse events – death, stroke, or myocardial infarction, for example – as a primary or major study outcome. While enormously helpful for limiting the sample size and duration of clinical trials, use of these composite endpoints (CEP) can be misleading. In this study, we proposed a conceptual framework to aid understanding of the significance of CEPs, their potential, and their problems. Co-investigators were Montori, Permanyer-Miralda, Ferreira-González, Pacheco-Huergo, Alonso, Akl, Domingo-Salvany, Mills, Jackowski, Schünemann, Jaeschke, and Guyatt. This study has been submitted for publication.

7. Naturopathy is a popular CAM therapy and licensing laws have been enacted in 12 US states and 4 Canadian

provinces. Currently, there are 642 practicing members of the Canadian Naturopathic Association; however, there are very limited data describing pediatric and adolescent patients who present for naturopathic care. To better inform this issue we conducted a systematic audit of pediatric and adolescent case files at a large, college-based, Canadian naturopathic teaching clinic. 482 charts were identified. The most common reason for presentation were skin disorders (23%), gastrointestinal complaints (17%) and psychiatric/behavioural disorders (15%). 35% of children were using CAM products at presentation, with 15% taking a herbal remedy. Of charts with vaccination information, 8.8% indicated that children were not vaccinated and, of those who were vaccinated, 26% reported an adverse reaction to vaccination. Co-investigators were Wilson, Gilchrist, Boon, and Mills. This study has been submitted for publication.

8. Closed and open grade I (low energy) tibial shaft fractures are a common and costly event and optimal management for such injuries remains uncertain. We conducted an economic analysis of treatment options for low energy tibial fractures. Our economic analysis suggested that, from both governmental and societal perspectives, reamed intramedullary nailing is the treatment of choice for closed and open grade I tibial shaft fractures. There is evidence from a societal perspective that treatment of low energy tibial fractures with therapeutic ultrasound and casting may also be an economically-sound intervention. Co-investigators were Bhandari, Sprague, Johnson-Masotti, and Gafni. This study has been submitted for publication.

9. Researchers and journal editors endeavor to publish studies that will impact the medical community. Little is known, however, about what factors predict increased impact of a publication. We therefore undertook a study to determine what factors predicted increased citations (i.e. the most common measure of impact) of studies published in 5 leading orthopaedic and 5 leading general medical journals. In our regression analysis study design was the only variable significantly associated with the number of citations after publication and citations within one year of publication. Meta-analyses, randomized controlled trials, and basic science studies received significantly more citations (mean=15.5, 9.3 and 7.6, respectively) than observational studies (mean retrospective=5.3, prospective=4.2) and case reports (mean=1.5) ($p=0.01$). Co-investigators were Bhandari, Devereaux, Montori, Swiontkowski, Tornetta III, Einhorn, Khera, and Schemistch. This study has been submitted for publication.

Dr. Ted Crowther

Current projects include:

1. Thesis project: A comparison of the cost-utility of chiropractic and pharmacologic management of chronic low back pain in adults. Low back pain in adults is a common, chronic condition associated with increased health care costs and reduced quality of life. It is commonly treated though chiropractic and pharmacologic means. This study measured quality of life and compared the cost-utility of these two common treatments for low back pain. Wilson and Cleary's model of quality of life provided the conceptual framework for which quality of life and values and preferences for treatment were viewed.

Employing anonymous data from two questionnaires from patients receiving chiropractic or pharmacologic treatment (n=43), the quality of life and cost-utility was measured and compared. The chiropractic treatment group enjoyed higher quality of life as measured by quality adjusted life years (QALY) (.50) when compared to the pharmacologic treatment group (.21). The chiropractic treatment group enjoyed a lower cost-utility ratio, or economic efficiency, (\$678 per QALY) compared to the pharmacologic treatment group (\$988 per QALY).

2. Developing an effective design for a multi-disciplinary, collaborative, multi-site trial of chiropractic manipulation as a treatment for adolescent idiopathic scoliosis (AIS). Co-investigators Dale Rowe, MD, Ronald Feise, DC, Michael Menke, DC, Thomas Souza, DC, Charles Goldsmith, PhD, Thomas Schaller, MD, Jaroslaw Grod DC. Thirty (30) pediatric subjects who present for assessment and monitoring of AIS at the Kalamazoo Center for Medical Studies, Kalamazoo, MI, orthopaedic clinic, and who meet inclusion/exclusion/criteria, will be randomized to one of the following groups for a six-month period: a group receiving usual medical protocols only (active control) or a real treatment group. The results of this study will allow the investigators to proceed to a multi-center, full-scale RCT that will specifically investigate the efficacy and effectiveness of chiropractic manipulative therapy for adolescents with AIS.

3. Construction and validation of the Scoliosis Quality of Life Index in Adolescent Idiopathic Scoliosis. Co-investigators Ronald Feise, DC, Sandra

Donaldson, Ted Crowther, DC, Michael Menke DC, James Wright, MD, MPH, FRCSC. A prospective cross-sectional design was employed to evaluate the Scoliosis Quality of Life Index (SQLI). SQLI is a 22 item self-reporting health-related quality-of-life questionnaire for idiopathic scoliosis patients. Eighty-four subjects with a mean age of 14.9 years participated. We determined reliability, validity, distribution of scores and clinical utility of SQLI in a hospital setting. Seventy patients were AIS patients (16 post-surgical, 30 braced, 24 unbraced) with a mean Cobbs angle of 30.7 degrees, and fourteen patients were sibling controls. We concluded SQLI is reliable, valid and demonstrates satisfactory distribution of scores. SQLI is a promising instrument in the assessment of AIS patients. Accepted for publication, Spine, July 15, 2004.

Dr. Carlo Ammendolia

Projects currently in progress include:

1. Trends in use and costs of chiropractic services in Ontario: a review of Ontario Health Insurance Plan and Workplace Safety and Insurance Board data from 1994 to 2001. An interesting look at utilization trends in chiropractic services and the relative impact the growth in the number of chiropractors has had on utilization.

2. Survey of plain film radiography protocols taught at chiropractic schools for acute low back pain. A total of 33 department chairs/heads in radiology/imaging at chiropractic schools will be surveyed using a web-based application. The use of evidence-based protocols and attitudes and beliefs regarding guidelines for acute low back pain will be assessed.

3. Assessing the management of a new episode of acute low back pain among chiropractic trainees. Adherence to evidence-based guidelines is often a measure of the quality of care patients receive. In this study, the management patient receives for their new episode of low back pain will be evaluated against recommendations from clinical practice guidelines.

**JOURNAL OF THE CANADIAN
CHIROPRACTIC ASSOCIATION
(JCCA)**

The JCCA is delighted to announce that Dr. Dana Lawrence DC, past editor of the Journal of Manipulative and Physiological Therapeutics (JMPT) has joined the Editorial Board of the JCCA. Dr. Lawrence is an Associate Professor at the Palmer Center for Chiropractic Research in Davenport, IA
Dana.Lawrence@palmer.edu

Dr. Mark Erwin DC, PhD has been named to the JCCA Editorial Board. Dr. Erwin is an Assistant Professor at the University of Toronto and is set to become our 2nd Research Chair.
mark.erwin@utoronto.ca

**HELP
SUPPORT
CHIROPRACTIC RESEARCH
and transform the profession
BECOME A MEMBER OF
THE
CANADIAN CHIROPRACTIC
RESEARCH FOUNDATION**

**Contact Dr. Allan Gotlib DC
Assistant Secretary CCRF
Tel: 416-781-5656
Fax: 416-781-0923
Email: algotlib@ccachiro.org**

**CANADIAN CHIROPRACTIC
RESEARCH FOUNDATION**



Dr. Rob Allaby DC
President, CCRF

The CCRF is intent on building a strong and sustainable foundation dedicated to facilitating chiropractic research and encouraging a new generation of clinician scientists. Enhanced research capacity is vital to achieving this goal but we won't get there without your financial support.

As President of the CCRF, I want to sincerely thank *all of the provinces* and in particular, Alberta, British Columbia, Manitoba, Saskatchewan, Ontario and New Brunswick, for their continued support of the CCA/CCRF national research program. Their commitment to our goals has ensured our continued success and on behalf of the CCA, the CCRF, the profession *and our researchers*, I sincerely thank each of them for stepping up to the challenges our profession faces.

In addition, I want to also thank the many individual members of the CCRF who annually contribute significant dollars which really allows us to create greater opportunities through leveraging.

We truly appreciate your participation and commitment to the CCRF.

The Foundation has worked hard this year and I am delighted to report briefly on some of our initiatives.

In Ontario, the Ontario Chiropractic Association has partnered with the CCRF and CIHR in support of our upcoming 2nd university-based Chiropractic Research Chair, an award that provides \$76,000 per year for 4 years for Dr. Mark Erwin DC, PhD. We are enormously thankful to the OCA and all 3300 Ontario chiropractors for their support.

In Alberta, Dr. Greg Kawchuk DC, PhD has been nominated for a CANADA Research Chair at the University of Alberta in Edmonton and we are waiting for an announcement in September.

In addition to Dr. Kawchuk and Dr. Erwin, the Foundation also supports the work of Dr. Jeff Quon at the University of British Columbia along with the BCCC, and the work of Dr. Walter Herzog at the University of Calgary along with the College of Chiropractors of Alberta. The CCRF also supports Dr. Jill Hayden at the University of Toronto along with the CIHR.

Our goal of building research capacity through strategic relationships invests in our most valuable commodity, our researchers who will enhance our credibility and eventual integration into our health system.

As a new initiative for the CCRF/CCA, we have become a sponsor of the Bone and Joint Decade Conference in 2005 which will be held in Toronto.

www.bjdcanda.org

We are also a sponsor of the 12th Cochrane Colloquium in Ottawa this year. www.colloquium.info

Our fundraising efforts have also realized successes. The Edmonton Chiropractic Society Run/Walk for Chiropractic Research recently held the 3rd Annual Backs in Action Run/Walk with proceeds going to the Canadian Chiropractic Research Foundation. Many thanks to the Edmonton Chiropractic Society, Drs. Kelly Fleck, Devon Phillips, Brad Gage, Patti Andrews, Wendy Coburn, Gloria Hong, Leila Elzein, Chris Nutting, and Kristen Sheppard who made the event another success.

Dr. Don Nixdorf has arranged a special offer from the BC Lions football Club for all BC chiropractors. With the purchase of any new 2004 BC Lions season ticket, the BC Lions will donate 15% of the purchase price to the Canadian Chiropractic Research Foundation and will give you first opportunity to secure tickets for the 2005 season. Many thanks to Dr. Nixdorf.

In Ontario, Dr. Eric Jackson arranged a Motorcycle Ride in the Ottawa area with proceeds going to the CCRF. He plans to make this an annual event. Our thanks go to Dr. Jackson for all of his hard work. All you bikers get ready for next year.

If you would like to become a member please send Dr. Allan Gotlib an email request for a membership application and help us continue to provide critical funding to our chiropractic researchers and our research projects. Please join us and help transform our profession.

FUNDING OPPORTUNITY

Alberta Provincial CIHR Training Program in Bone and Joint Health

This is an outstanding CIHR funded specialized program for transdisciplinary research and training in bone and joint health for health professional clinicians. The program's foci include primary and secondary osteoarthritis, back disorders and joint disorders. The program addresses the need for clinician-scientists conducting research related to such conditions of rapidly growing societal impact and build on the established record of the University of Alberta and the University of Calgary research strengths. Chiropractors who are PhD students are eligible. If you are interested visit the website at: www.boneandjoint-training.ca

UPCOMING CONFERENCES

2004

September 17-19 Montreal
Chiropractic Research Symposium
Boucher.jean_p@uqam.ca

October 2-6 Ottawa
Cochrane Colloquium
www.colloquium.info

November 10-13 Melbourne, Australia
World Congress on Low Back Pain and Pelvic Pain
www.worldcongresslbp.com

2005

April 8-9 Kyoto, Japan
International Multidisciplinary Symposium
www.nuancekk.com/Kyoto2005

This Bulletin is distributed to the Canadian chiropractic research community. (30/07/04)
You may view the preceding eight bulletins on the CCA website at www.ccachiro.org For further information contact Dr. Allan Gotlib, CCA Director, Research Programs at tel: 416-781-5656, algotlib@ccachiro.org

Canadian Chiropractic Consortium Members (as of July 2004)

Dr. Jean Boucher PhD
Université du Québec à Montréal
boucher.jean_p@uqam.ca

Dr. Pierre Boucher DC, PhD
Université du Québec à Trois-Rivières
Pierre_b_Boucher@uqtr.quebec.ca

Dr. J. David Cassidy DC, PhD
Toronto Western Hospital Research Institute
University of Toronto
dcassidy@uhnres.utoronto.ca

Dr. Pierre Côté DC, PhD
Institute for Work and Health
University of Toronto
pcote@iwh.on.ca

Dr. Jim Dickey PhD
University of Guelph
jdickey@uoguelph.ca

Dr. Francois Hains DC, MSc
College of Chiropractic Sciences
fhainsdc@videotron.ca

Dr. Walter Herzog PhD
University of Calgary
walter@kin.ucalgary.ca

Dr. James Hu PhD
University of Toronto
Faculty of Dentistry
james.hu@utoronto.ca

Dr. Greg Kawchuk DC, PhD
University of Calgary
kawchuk@ucalgary.ca

Dr. Jeff Quon DC, MHSc
University of British Columbia
quon@interchange.ubc.ca

Dr. Normand Teasdale PhD
Université Laval
Normand.Teasdale@kin.msp.ulaval.ca

Dr. Howard Vernon DC, PhD
CMCC hvernon@cmcc.ca