



Douglas M Lawson DC, MSc, PhD (Student)

University of Calgary, Faculty of Medicine,
Department of Medical Science,
Medical Education Research Centre

Dr. Doug Lawson is a second-generation chiropractor involved in research in Medical Education. His father, Doug Sr., recently passed away on April 12, 2004 and was a graduate of Palmer School of Chiropractic. Doug graduated from Cleveland Chiropractic College in 1976 and practiced full-time in Calgary, Alberta until 1995. He was the Chair of the Canadian Chiropractic Examining Board (CCEB) until 2003, at which time he was forced to leave the position due to complications with rheumatoid

arthritis. Doug completed a Master of Science in Medical Education at the University of Calgary in June of 2003. Dr. Lawson is currently a student in the PhD programme in Medical Education at the University of Calgary and will be writing his candidacy examinations in December of this year. His supervisor at the university is Dr. Peter Harasym, who was also Doug's supervisor for his Masters. He recently received the Medical Science Graduate Education Scholarship from the University of Calgary.

The topic of Dr. Lawson's Master research project was "*Use of the Multifacet Rasch Model to Adjust for Error Variance Due to the Examiner Stringency/Leniency Effect in OSCEs*". The research project had a direct bearing on the procedures used by the CCEB. Based on his research project, all candidate scores from the Clinical Skills Examination at the CCEB are adjusted for the error variance due to examiners. The final candidate scores are thus a closer approximation to their true scores.

Dr. Lawson's current thesis work is in the field of cognitive psychology, specifically the clinical reasoning methods of chiropractors and how they arrive at clinical decisions. Doug hopes that the research will provide information, not only on how chiropractors currently reason and arrive at clinical decisions, but on how best to educate chiropractors in both the undergraduate and post-graduate environments. This information will become more important as the profession, governments, and the public ask for assurance of the continuing competency of practicing chiropractors.

Dr. Lawson is currently involved in a number of research projects in Medical Education, and in providing faculty development workshops at chiropractic colleges. Activities over the last year include:

- *Applying the Multifacet Rasch Model (FACETS) to Examination Scores.* Harasym, P.H., Lawson, D.M., Norcini, J. Ottawa Conference on Medical Education, July 2004

- *Does Team Learning have a place on a natural health care campus? What could this mean for the professor, the student, and the curriculum?* Lawson, D.M., Invited lecturer, Northwestern Health Sciences University, February 2004
- *Student evaluation through the use of extended-matching questions (EMQs). Why have the Canadian Chiropractic Examining Board, the Medical Council of Canada, and the National Board of Medical Examinations moved to extended-matching items?* Lawson, D.M., Invited lecturer, Northwestern Health Sciences University, February 2004
- *Managing classroom examinations: from question development to question banking.* Lawson, D.M., Invited lecturer, Northwestern Health Sciences University, February 2004
- *Reducing uncertainty about pass/fail decisions.* Lawson, D.M., Invited lecturer, Canadian Memorial Chiropractic College, December 2003
- *A Shift in a Candidate's Acceptability Due to Shifts in Ability of the Applicant Pool.* Harasym, P., Crutcher, R., Lawson, D. The Generalists in Medical Education, November 2003
- *The Utility of Applying the Multifacet Rasch Model to Judged Scores.* Lawson, D.M., Harasym, P.H. The Generalists in Medical Education – Leader, Round Table Discussion, November 2003
- *A Comparison of Classical Test and Item Response Theories for Selecting Foreign Graduates into a Family Residency Programme.* Harasym, P., Crutcher, R., Lawson, D. TUFH Conference, Newcastle Australia, October 2003
- *Comparing Candidate Performance on Canadian Licensure Examinations.* Lawson, D.M., Naseem, M.T., McDonald, C. The Journal of Chiropractic Education, Volume 17, Number 1, page 20, March 2003
- *Using standardized patients to identify stringent / lenient examiners and to correct for examiner and standardized patient performance.* Lawson, D.M., Harasym, P.H. The Journal of Chiropractic Education, Volume 17, Number 1, page 19, March 2003

The following are a list of the research projects currently submitted for publication:

- *Use of the Multifacet Rasch Model to Adjust OSCE*

Scores Due to Judge Hawk and Dove Effect. This paper is derived from the research on Doug's Master project. Drs. Harasym, Woloschuk, and Schumacker are co-authors.

- *The dual roles of the global rating scale on a 30 station Objective Structured Clinical Examination for chiropractic radiologists: reward and punishment, plus standard setting.* This is a research project done in cooperation with the American Chiropractic Board of Radiology and involves the addition of a global rating scale in addition to the more traditional checklist for their specialty examination. Dr. Renée Devries is the second author on this research project.
- *The contribution of standardized patients to error variance in candidate scores on a high stakes objective structured clinical examination.* This research project is a natural evolution of Doug's Master thesis work and explores the effects of the standardized patient performance on candidate scores. This research project was done in cooperation with the Canadian Chiropractic Examining Board; Dr. Peter Harasym is the second author on this project.
- *Evaluating sports residency admission procedures for the College of Chiropractic Sports Science Residency Programme.* This research project was done in cooperation with the College of Chiropractic Sports Sciences and explores the use of videotaped interviews as part of the application process, and the contribution of applicant interviews to the accept/reject decision. Dr. Greg Uchacz is the second author on this project.
- *Reliability of MPLs set by examiners on an OSCE on two separate occasions.* Minimum performance levels (MPLs) on licensure examinations are typically set by a team of experts. This research projects looks at the consistency of the MPLs set by experts (examiners) on the same cases at different times. The project was done in cooperation with the CCEB. Dr. Peter Harasym is the second author on this project.

Dr. Lawson and Dr. Hettie Till of Canadian Memorial Chiropractic College (CMCC) are cooperating on a research project that is currently undergoing institutional review board approval at both the CMCC and CCEB. It is titled *Predictors of Success at the Canadian Memorial Chiropractic College and on Licensure Examinations*. The primary objective of the research is to determine if

the information gathered as part of the application process (interviews, grade-point-averages, etc) can predict performance while at chiropractic college, and on licensure examinations. The project is being done with cooperation from both the CCEB and the Canadian Memorial Chiropractic College.

Since leaving the CCEB, Dr. Lawson has had the opportunity to work with many of the chiropractic specialty programmes, and chiropractic colleges. Psychometrics, Item Response Theory, assessment, team learning, cognitive psychology, and continuing competency are his areas of interest, and he has enjoyed being able to provide assistance to chiropractic organizations.

Although Dr. Lawson's primary hobby seems to be data-analysis, he and his wife Maria enjoy reading, camping, and spoiling their pet Schitzu, Schatzie. Doug and Maria have two children. Their daughter, Holly, en-

joys her work at WestJet, a truly customer oriented airline. Their son, Tyler, is graduating in June of 2004 from Stanford with a PhD in pure math and is moving in July to a post-doctoral position at MIT.

Although Doug's activities are severely curtailed due to the challenges of managing his rheumatoid arthritis, he enjoys being contacted by others who are conducting research in the Medical Education field, or who appreciate an independent viewpoint.

Douglas M. Lawson, BA, DC, MSc (Medical Education)
4832 – 26 Ave NE
Calgary, Alberta T1Y 1C9
Phone: 403-512-8729
Fax: 403-285-1291
E-mail: dmlawson@ucalgary.ca

4th Canadian Chiropractic Scientific Symposium

Hosted by the Consortium of Canadian Chiropractic Research Centres

Date: SEPTEMBER 18, 2004

Place: MONTREAL

Symposium convenor: Dr. Jean Boucher PhD

Contact: Dr. Jean Boucher PhD or Dr. Allan Gotlib DC

Email: boucher.jean_p@uqam.ca

algotlib@ccachiro.ca