

Chiropractors at McMaster University: The formation and direction of a university-based multidisciplinary chiropractic working group

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At present globally there are rare examples of chiropractic training in publicly funded universities.¹ The absence of a university-style research tradition, coupled with a lack of access to government funding has acted as a barrier to the scientific development of the chiropractic profession.²

Within chiropractic educational facilities there are no formal programs cultivating chiropractic clinician researcher development.³ In examining the development of clinician researchers, Coulter (1986) observed “to become a productive researcher the student requires prerequisite knowledge of the area, skills in research methodology, academic values and attitudes, a supportive environment, and advisors/mentors with specific responsibility for monitoring the students’ progress.”⁴ It has also been recognized that research infrastructure, located outside of traditional chiropractic colleges is needed for the profession to develop productive clinical research programs.³

Professions of any health care discipline having faculty members at publicly funded universities are afforded academic freedom while maintaining the growth and development of their profession, with a focus on active scholarly publication thus fostering a strong research culture.⁵ A university setting reduces barriers to interdisciplinary research and allows clinical collaboration that utilizes the most current technology. A university, or university hospital setting also allow for clinician training, incorporation of experimental treatment protocols and

facilitate delivery of health care to the general public.¹ The chiropractic profession needs to remodel its present approach to clinical education and research to remain relevant in an era of evidence-based practice.⁶

Since January of 2009, a group of chiropractors that also have an affiliation with McMaster University, have been meeting quarterly on the McMaster campus. These affiliations may be as graduate students (chiropractors who are currently in pursuit of a Masters or PhD, or are medical residents), full-time, part-time, or adjunct faculty, clinical faculty, research affiliates, academic committee members or those who supervise McMaster medical interns in their clinical environment. The group allows chiropractors that are operating at some capacity within the mainstream university system to become aware of their colleagues. It also assists to foster collaboration among these colleagues within such an environment to serve and enhance the chiropractic profession in improving patient care.

With the support of the Canadian Chiropractic Association and the Ontario Chiropractic Association, the group has been able to expand and thrive. Meetings consist of a member of the group presenting on a topic that relates to their McMaster University affiliation, followed by a round table discussion. At a recent meeting, a McMaster University Professor Emeritus, (Department of Clinical Epidemiology & Biostatistics) Dr. Charlie Goldsmith was present. He led the group through a workshop to identify

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what specific priorities and collaborative goals the group should strive toward, to become productive.

The workshop focused on how the chiropractic working group could become a useful part of McMaster University. A workshop exercise was derived from a textbook called “The Quality Toolbox,”⁷ and was broken up into three distinct phases:

- 1 brainstorming
- 2 affinity diagrams
- 3 interrelationship digraphs

The process allowed for anonymous intellectual brainstorming, which prevents power imbalances in groups with diverse backgrounds, and individuals at various stages in their respective careers or positions by giving each person an equal voice. Having each group member write three ways to answer the question “How do we make ourselves a useful part of McMaster University?” on three separate pieces of paper was the first step. The pieces of paper were then passed to a neighbour, and again one more idea was added per person based on this new information.

An affinity diagram was created with the results of the brainstorming session, in which like ideas were grouped together.⁸ This was achieved by posting all the ideas on a wall so that first, everyone could read them, and then second, people could freely move ideas around in attempt to group them. This was done in silence, and all pieces of paper were moved with the non-dominant hand of the person moving it. Once the ideas were grouped, a key-word summary of the concept from each grouping was created. The McMaster chiropractic working group came up with 7 concepts (see Table 1).

To interpret the meaningfulness of the concept summaries from Table 1, pair wise comparisons were performed to determine the relationship of concepts to each other. This is deemed an “interrelationship digraph.”⁸ Some concepts require input from other concepts to become reality. On the other hand, some concepts generate output used to fuel additional concepts. In the end it was revealed that, to prioritize goals for the working group, the concepts that need to be prioritized, are those that generate the most output to the other concepts. The high output generating activities will allow for the greater facilitation of the concepts that require the most input over the course of time.

The McMaster chiropractic working group came to the

Table 1 *Interrelationship Digraph Results**

Concept	Number Requiring Input	Number Generating Output
Attract External Funding	3	1
Increase Awareness	2	3
University Integration	6	0
Public Education	2	4
Contribute to Daily Operations of University Capacity and Function	2	2
Attract Prospective DC Graduate Students	3	2
Writing: Generate and Disseminate Original Grants/Research/Peer Reviewed Publications	0	6

* Input and Output do not all sum to 6 as some relationships were considered to be equally an input and output, when considered pairwise.

conclusion based on this exercise that it is through scholarly writing, that the greatest output can be achieved. This could take the form of grants, editorials, seed funds, and peer reviewed publications. The productivity of the group would be monitored by an internal group curriculum vitae and be an agenda item at each meeting. As such, the group has prioritized the various aspects of writing to proceed as a functional working group on collaborative projects. Balancing strategic interests, structured supports, technical knowledge and skill, and a culture of collaboration are crucial to the group’s success over the long term.⁹ Lastly, faculty members of the group must be able and willing to share, not own, curricular turf.¹⁰

This workshop and group development process offers to act a template for other university-based working groups. There are vast resources and opportunities within the publicly funded education system as evidenced by the chiropractic professions in other countries.¹¹ This manuscript also offers to inform other chiropractors presently operating in isolation (as clinicians, scientists, clinician scientists or clinician scientists in training) within other publicly funded universities of the practical application

of group formation and interdepartmental collaboration.

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Guests: Dr. Dave Brunarski (Ontario Chiropractic Association), Dr. John Tucker (Canadian Chiropractic Association).

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