

## The JMPT: Conception, Birth & Early Years

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In March, 1998, the *Journal of Manipulative and Physiological Therapeutics (JMPT)* will mark its twentieth anniversary of publication! Born in that transition period between what might be called the end of the accreditation/recognition campaigns and the onset of "modern times," the arrival of the JMPT foreshadowed the infant science of chiropractic. One might well ask whether this journal prompted the emerging scholarship of the 1980s, or merely reflected an inevitable development within the profession. However, for the sake of this brief paper, it will be enough to recall those early events, and leave their interpretation for subsequent writers.

The JMPT was certainly not the first attempt to create a science-oriented magazine for the profession. The Research Bulletin of the American Chiropractic Association (ACA) was distributed from 1924 through 1930 (Keating et al., 1995), and presented the findings of the ACA's Research Bureau. The bureau, successively headed by Leo J. Steinbach, DC (1924-25), A.B. Chatfield, DC (1925), John Monroe, AM, DC (1926-29) and Clarence W. Weiant, DC (1929-30), was a well-intentioned but naive attempt to collect data bearing on the outcomes of chiropractic care. The quality of its contents reflects a lack of appreciation of standards of clinical research and reporting. The Bulletin was discontinued in 1930 when the National Chiropractic Association was formed through the merger of the ACA and the Universal Chiropractors' Association (Keating & Rehm, 1993).

Palmer graduate (class of May, 1925) C.O. Watkins tried to create a legitimate scientific periodical for the profession in December, 1941 with the seminal issue of his American Chiropractic Journal (Keating, 1989, 1992). Unlike the ACA's Research Bulletin, Watkins' journal was intended as a forum for sharing research findings contributed by any interested party.

Then the editor and publisher of Montana chiropractors' monthly professional newsletter, but better remembered today as the founding chairman of the committee that became the Commission on Accreditation of the Council on Chiropractic Education (CCE), Watkins explicitly sought to "assemble, correlate, and disseminate scientific material for educational purposes to the members of the chiropractic profession" (Watkins, quoted in Keating, 1989). However, with so little real interest in scientific matters among the chiropractors of his era, this journal could not survive.

A referee process for manuscripts submitted to the Chirogram, a monthly publication of the Los Angeles College of Chiropractic, was established in 1963 (Instructions, 1963), a decade and a half before JMPT's debut. However, the Chirogram was primarily a house organ of the college and not truly intended as a scientific periodical. Noteworthy as the "official scientific journal" of the Swiss Chiropractors Association, the Swiss Annals was founded in 1960 with the hope of attracting an interdisciplinary audience and contributors. However, relatively little interest was generated beyond the membership of the sponsoring society. The first issue of the JMPT described the Swiss Annals as "the most complete, single collection of scientifically based papers produced within the chiropractic profession" (JMPT, 1978). The Annals continued in publication for a bit more than 20 years. Although well thought of, it was unable to attract a continuing backlog of quality papers. The journal's editor courageously refused to lower standards in order to fill the pages, and the periodical eventually disappeared.

The International Chiropractors' Association (ICA) produced a specialized magazine in 1965: the International Science Review of Chiropractic. Among the memorable material published therein was Carl S. Cleveland, Jr.'s laboratory studies of experimentally induced subluxation in the rabbit (Cleveland, 1965 A&B). This periodical included among its advisors and review committees men such as Stephen Duff, DC, Galen Price, DC and Sidney E. Williams, DC; the journal may not have lasted much beyond its first year.

Yet another effort to create a scholarly forum for the profession was the Journal of Clinical Chiropractic (JCC), published during 1968-1981. This periodical included among its editorial board members such memorable chiropractors as William Coggins (president of Logan College); Julius Dintenfuss (longtime editor of the NCA Journal's "Science Sidelights"); Henri Gillet (of motion palpation fame); Scott Haldeman; William D. Harper (president of the Texas Chiropractic College); Joseph Howe (radiologist); Edwin H. Kimmel (member of the ACA's board of governors); Ernest G. Napolitano (president of the New York Chiropractic College); Herman Schwartz (proponent of chiropractic care for the mentally ill); Chester C. Stowell (administrator at the Lincoln and National colleges); Clarence Weiant (former director of research of the NCA, dean of the New York school, and by this time, a PhD anthropologist as well as a chiropractor); and Roy W. Hildebrandt, then chairman of Palmer College's radiology department. The JCC was intended to "present basic research, educational information, scientific and technological data, and relevant tangential materials to the chiropractic profession. The JCC has no social or political design whatsoever." Kimmel (1998) recalls that "the JCC was too advanced" for the rank and file of the profession at that time.

In August, 1974 the leaders of the CCE, men such as George Haynes, DC, ND, MS; Orval Hidde, DC, JD; Joseph Janse, DC, ND; Leonard J. Fay, DC, ND; and CCE Director of Education John Fisher, EdD achieved their long-sought goal of federal recognition for chiropractic education when T.H. Bell, the U.S. Commissioner of Education, informed the CCE that it had received a preliminary, one-year approval as an accrediting agency for chiropractic schools (Bell, 1974). A few men in leadership roles now turned their attention to the scholarship and research needs of the profession. The president of the ACA publicly discussed the need to conduct controlled clinical trials of the chiropractic art (Dallas, 1975). Janse (1978) called upon members of the National College's faculty to contribute original papers to the chiropractic literature, and petitioned the ACA to create a scientific periodical for the profession. He perceived that:

"There is a marked and ever-increasing need within the chiropractic profession to present subjects of critical study, innovative investigation and research in the form of well-prepared papers that will appear in major publications within the profession, as well as clinical and scientific journals outside the profession.

"The entire scientific and clinical community is seeking information from the chiropractic profession relevant to the major concepts, hypothesis and conjectors [sic] that comprise the thinking of our people. We are being challenged at every level, not necessarily in a mitigating or derogatory manner. People are interested in us and they want to know how we think and ideate and what we have done on an investigatory basis (Janse, 1978)."

The findings of the conference on spinal manipulative therapy convened by the National Institutes of Health in 1975 (Goldstein, 1975; Wardwell, 1992, pp. 192-3) added to the recognition of the need for scientific research bearing on the effects of manual methods of health care. Gitelman, a co-founder of the College of Chiropractic Sciences (Canada), described the conference as the "great eye-opener":

"We were in the ball game, but just barely so. We took a look at our potential research personnel

and facilities and realised that we were quite deficient...

Having reviewed all the previous chiropractic research, we found it wanting, for with a few notable exceptions, such as Illi, Janse, Gillet, Liekens, Johnson and Grice, who had made worthwhile contributions, most of the work of early researchers was questionable. I use the word "questionable" in order to be kind, for I feel that much of it must have been based on a 'voice heard in the middle of night' ... But strange as it may seem, many have swallowed such a dubious ball of wax, sold with a sugar coating of Innate Intelligence, a smattering of science and such inane phrases as 'The power that made the body will heal the body,' 'Above down and inside out,' 'Put the bone in motion and Innate will do the rest.' These systems were death to thought and undermined our educational institutions, leaving no room for research other than by their chauvinistic (technique) founders, who dared not do legitimate research" (Gitelman, 1984).

The concerns about the lack of research generated by the NIH conference were soon amplified by the U.S. Office of Education's (USOE's) insistence that scholarly activities must be considered by the CCE in evaluating the accreditation-worthiness of chiropractic colleges. The USOE required a modification of the CCE's criteria for evaluating schools: "There shall be research instead of should be research" (Schierholz, 1986, p. 36). Likewise, Murray Goldstein, DO, MPH, organizer of the NIH conference, advised the CCE to "get research into chiropractic colleges" (Schierholz, 1986, p. 34).

Joseph ("J.J.") Janse, who graduated a dogmatist from the National College of Chiropractic (NCC) in 1937, had evolved in his thinking over the decades. Thirty years later, his homespun scientific epistemology enabled him to anticipate the next major challenge confronting the chiropractic profession; that is, the development of a critical, skeptical attitude and an outcomes database. J.J. saw to it that the National College was an active participant in the multi-campus research projects established by the Los Angeles College of Chiropractic's director of research, Henry G. Higley, DC, MA (Minutes, 1967 A&B). The NCC leader was impressed by repeated calls from Helmut Bittner, DC, a faculty member at the Chiropractic Institute of New York, for the ACA to establish a scientific quarterly (Minutes, 1966 A, 1967 A&B). Now Janse took up the cause, and repeatedly petitioned the national society to exercise leadership in chiropractic science.

It was a futile effort, however, and Janse eventually accepted that the ACA had little if any serious interest in scholarship (Kimmel, 1998). Detoured but not derailed, National's president decided that his alma mater must take the lead in fostering scholarship in chiropractic:

"... National has a totally undeniable and unavoidable role to play that is exploding in dimension ... The chiropractic profession must augment its interdisciplinary relations with the other major health care professions. No longer can we avoid contact with others. No longer can we retain our identity and survive unless we enter into the world of professional and clinical intercourse and by means of initiative and innovative input define our function as a primary component of the health care team ... The chiropractic profession must come to more effectively define and index its intents, designs and programs of critical study, innovative investigation and research, both in laboratory and clinical atmospheres. Imitation, plagiarism and wasting wherewith on projects that are not relevant cannot be indulged in ... The chiropractic profession has got to evolve more sophisticated and learned publications, both in the form of periodicals and textbooks. There is a marked paucity of good scientific, clinical and instructional literature in the profession. Resultantly, a resort to the texts of other health care professions dilutes the interests that should encompass the singular concepts and principles of our clinical dimensions ..." (Janse, unpublished).

Janse turned to Roy W. Hildebrandt, DC, PhC, a 1949 graduate of the Palmer School of Chiropractic (PSC) and former chairman of his alma mater's radiology department. Like Janse, Hildebrandt recognized the need for a scientific epistemology among chiropractors, and had

publicly expressed such views a decade earlier in an article (Hildebrandt, 1967 A&B) that sent ripples of concern through the profession. First published in the ICA Review and subsequently in the ACA Journal, Hildebrandt addressed the need for the critical attitudes of the scientist in things chiropractic. The PSC radiographer had been toying with the idea of establishing a legitimate scientific periodical while still working in Davenport, but thought it unlikely that his alma mater would commit to such a venture (Miller, 1998). In 1970, Hildebrandt accepted a position at NCC as dean of the National-Lincoln School of Postgraduate Education and later as director of publications & editorial review (Beideman, 1995, pp. 110, 221; Dzaman et al., 1980, pp. 119-20). Sometime in 1976 or 1977, Janse directed Hildebrandt to look into what would be required for the National College to establish a legitimate science journal of chiropractic.

Hildebrandt's investigation led him to specify two essential stipulations if the NCC elected to create a scientific periodical. The first was that the college must grant the editor of the new periodical complete autonomy; that is, absolute authority to make all decisions concerning all aspects of the journal, including acceptance/rejection of manuscripts submitted for consideration to publish, advertising, graphic design, etc. Secondly, Hildebrandt proposed that the College should set aside \$100,000 to cover the costs of journal operations for the first few years of publication. Given that the political orientation of chiropractic institutions so often influenced their patronage, this set-aside of significant capital was a wise strategy.

Janse consented to Hildebrandt's conditions (Hildebrandt, 1981 B), and appointed the radiographer to serve as the magazine's first editor. The pair reached into National College's history to come up with a suitable name for the new periodical: "physiological therapeutics" had been explicitly mentioned on diplomas issued by the National College at least as early as 1918. They would call this new scientific forum the Journal of Manipulative & Physiological Therapeutics and dedicate the magazine "to the Advancement of Conservative Health Care Principles and Practices" (Beideman, 1995, p. 254). The seal of the National College of Chiropractic, with its motto "esse quam videri" (to be rather than to seem), was situated on the cover of the journal.

Table 1: Members of the original editorial board of the *JMPT* (1978) and their institutional affiliations.

Roy W. Hildebrandt, DC	Editor, National College of Chiropractic
Julius Dintenfass, DC	Associate Editor, Private Practice
Calvin C. Kuehner, PhD	Associate Editor
Alan H. Adams, DC	private practice
Robin R. Canterbury, DC, DACBR	Palmer College of Chiropractic
Barry P. Davis, PhD	Logan College of Chiropractic
William C. Davis, PhD	Western States Chiropractic College
Norman A. Frigerio, PhD	Argonne National Laboratory
Ronald Gitelman, DC	Canadian Chiropractic Association
Scott Haldeman, DC, PhD, MD	University of California at Irvine
Andries M. Kleynhans, DC	Australian International College of Chiropractic
Irvin M. Korr, PhD	Texas College of Osteopathic Medicine

George Kwapinski, DMSc	National College of Chiropractic
Chris A. Pinkenburg, DC	private practice
Stanley Plagenhoef, PhD	University of Massachusetts
Akio Sato, MD, PhD	Tokyo Institute of Gerontology
Paul H. Silverman, PhD	State University of New York
Bertram Spector, PhD	New York Chiropractic College
B.J. Tenny, PhD, JD	Lewis University, College of Law
Tuan A. Tran, PhD	Los Angeles College of Chiropractic
Walter I. Wardwell, PhD	University of Connecticut at Storrs
James F. Winterstein, DC, DACBR	private practice

Among Hildebrandt's first tasks was to organize an editorial board, whose members would serve as blinded reviewers (Hildebrandt, 1981 A) of manuscripts submitted for consideration to publish. The new editor drew from within and beyond the ranks of the chiropractic profession (see Table 1). Chiropractors affiliated with the National College were joined by faculty and field practitioners associated with Logan College, New York Chiropractic College, Palmer College, Western States College and the International Chiropractic College in Australia. Scholars associated with allopathic and osteopathic medicine, the social sciences and the legal profession also agreed to participate in the new venture. To their ranks were added a number of additional scientists and scholars in the next few years.

The Journal made its debut in March, 1978. Hildebrandt expressed his view of the need for the *JMPT* in an opening editorial:

" ... the need for a publication to serve explicitly as a vehicle for the compilation, in an acceptable format, of knowledge relating to the bases of chiropractic science and art is non-debatable -- the future maintenance of the political, educational and economic progress (of the chiropractic profession) made to this point in time may depend upon it to a significant degree.

"Agreed, for the reason just stated, as well as for its importance to scientific and clinical progress in itself, there is a need for such a publication; but why a *Journal of Manipulative and Physiological Therapeutics*? Why not a *Journal of Chiropractic*? The answer is simple. The objective here is to compile knowledge relating primarily to the bases of chiropractic science and art as an alternative primary system of health care, not to promote the professional aspects of chiropractic; that being very ably done now by a number of international, national, regional state and provincial chiropractic journals" (Hildebrandt, 1978).

This first issue was an all-National College production (see Table 2). Indeed, not until the second issue of the *JMPT* and J. Alan Robertson, DC's case study (Robertson, 1978) did an article authored by someone not affiliated with the National College appear, and not until the third issue was a contribution seen from a faculty member affiliated with a chiropractic college other than the NCC (Will, 1978). In the next few years, however, the journal attracted a progressively greater proportion of its contents from beyond its parent institution. Original data reports were also hard to come by in those early issues, and Hildebrandt therefore decided (probably reluctantly) to reprint quality manuscripts from other periodicals (Keating et al., 1989). To encourage contributions, the journal implemented a series of annual awards for the best papers submitted by

interns, residents, graduate students and fellows (Awards, 1980).

Table 2: Contents of Volume 1, Number 1 of the JMPT, March, 1978.

Author(s)	Title of Article	Author Affiliation(s)
Roy W. Hildebrandt, DC	Editorial: Why a Journal of Manipulative & Physiological Therapeutics?	National College of Chiropractic
Roy W. Hildebrandt, DC	The scope of chiropractic as a clinical science and art: an introductory review of concepts	National College of Chiropractic
Joseph Janse, DC	Malcoordination of sensory-motor synchrony and the development of cranio-facial-cervical involvements.	National College of Chiropractic
William J. Hogan, DC & Roger Kaplan, DC	The therapeutic effects of magnesium orotate in serum lipid reduction	National College of Chiropractic and private practice
Warren T. Jahn, DC	Standardization of orthopaedic testing of the cervical and cervicobrachial regions.	National College of Chiropractic
Reed B. Phillips, DC, DACBR	A statistical significance defined in an epidemiological evaluation of low back pain.	National College of Chiropractic, private practice, and Department of Community Medicine, University of Utah.
Hun-Lin Lin, PhD, Atsushi Fujii, PhD, Helene Rebechini-Zasadny, MS & David L. Hartz, DC	Experimental induction of vertebral subluxation in laboratory animals.	National College of Chiropractic

With a sound editorial board in place and a slowly but steadily improving backlog of quality papers, Hildebrandt turned his attention to the issue of dissemination. Hildebrandt recognized that within the scientific community, unless new information is published in retrieval sources (i.e., indexed journals), "for all practical purposes, [it] does not exist" (Hildebrandt, 1981a). Science is a public process of information refinement, and the research process for any investigation is not complete until the information can be scrutinized and challenged by any interested party. However, in the case of chiropractic data, no indexing for chiropractic periodicals existed at the time of the *JMPT*'s introduction.

Roy Hildebrandt set out to place his journal within the worldwide health science literature. As early as December, 1979 the *JMPT* announced its adherence to the "Vancouver Conference" guidelines for biomedical publications (Uniform, 1981), a step intended to bring its scientific review process into conformity with those of other health science journals. In March, 1981 he was pleased to announce that the *JMPT* had been accepted for indexing by the Institute for Scientific Information and the Biosciences Information Service (BIOSIS) (Hildebrandt, 1981 A). However, he ran into a

catch-22 in his efforts to have the JMPT included in Index Medicus, the indexing sourcework of the National Library of Medicine. He was informed that there was little if any interest in chiropractic literature, and that the National Library of Medicine could not, therefore, justify JMPT's inclusion in its Index. Hildebrandt responded by scouring the biomedical literature for all available mentions of "chiropractic." The overwhelming majority of "hits" were negative anecdotes from medical authors attesting to the dangers of chiropractic care. Armed with these search results, Hildebrandt suggested to the National Library of Medicine that the lack of interest in chiropractic literature was, to a significant extent, a consequence of the exclusion of all chiropractic periodicals from the Library's biomedical index.

In September, 1981 Hildebrandt reported to *JMPT*'s readers that the periodical had finally been accepted for indexing in Index Medicus, effective with the first issue in 1982 (Hildebrandt, 1981 B). In the same editorial, he noted that the USSR Academy of Sciences had decided to index the JMPT back to its first issue in 1978. The JMPT had "arrived" as a legitimate scientific periodical.

In the years since, the periodical has undergone numerous changes. Publication of the JMPT was taken over by Williams & Wilkins, Inc., although ownership continues to reside with the National College of Chiropractic. Indexing of JMPT's content has expanded, and reprint articles have become scarce. Hildebrandt resigned in 1986 and was succeeded as editor by Dana J. Lawrence, DC. In 1987, the periodical expanded its publication schedule from four annual issues to six; in 1990, the journal commenced to publish nine issues per year. These increases in publication frequency reflect the expansion of scientific activities within the profession over the course of the JMPT's life. Moreover, the contents of this scholarly journal of chiropractic have evolved, with growth in the number of controlled clinical trials and other sophisticated research designs increasingly in evidence. Unfortunately, although the JMPT's success as a meaningful forum for chiroscience has inspired many other scientific (and, regrettably, pseudo-scientific) periodicals, the improvements in the JMPT have apparently not been matched by growth in interest among members of the chiropractic profession. While the ranks of chiropractors have been estimated to be as great as 60,000 globally, the net press run of the JMPT for its November/December 1997 issue was only 4,034 copies (Statement, 1997), or about 7% of the profession's worldwide membership.

As a learned discipline, chiropractic has come a long distance from the testimonial advertising that constituted its earliest literature (e.g., Palmer, 1897) to the recent expansions of its scientific database and a skeptical, scholarly, widely available fund of information. A good deal of credit for encouraging and sustaining modern developments in the science of chiropractic should be granted to doctors such as Hildebrandt, Janse and Lawrence and to the scholarly vehicle they have created: the Journal of Manipulative & Physiological Therapeutics. Happy birthday to the *JMPT*!

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