

CHIROPRACTIC (GENERAL)

# Chiropractic Represented at the First World Congress of Biomechanics

Editorial Staff

The first World Congress of Biomechanics was held on August 30 through September 3, 1990 at the University of California, San Diego. Chiropractic was well-represented among the many specialities by Drs. Arlan W. Fuhr and Paul Osterbauer (president and research director, respectively, of Activator Methods) and Dr. John Triano, Chief of Staff of the National College of Chiropractic. The Congress attracted over 3,000 participants and included some 1,200 paper presentations during the six day meeting.

The initial concept of the World Congress was based on the recognition that a variety of disciplines are interested in biomechanics, a field which thrives due to this diverse input. A biomechanist may be a physicist, attorney, psychologist, sociologist, dentist, educator, historian, chiropractor or engineer. Biomechanists have attended biomechanically relevant conferences in their own disciplines, but have not often had the opportunity for interdisciplinary exchanges. The World Congress offers just such opportunities on an international basis.

Many of the American participants at the congress are members of the United States National Committee of Biomechanics, an organization comprised of member societies, such as the American College of Sports Medicine, the American Physiological Society, the Orthopedic Research Society, and the Society of Automotive Engineers, among others. Many of these disciplines should be of interest to chiropractors, whether the DC is in general practice or specializes in sub-fields such as sports medicine or orthopedics.

During the past two years Drs. Fuhr and Osterbauer have collaborated with a team composed of graduate students Joe Peles and Kathy Derickson, and headed by Associate Professor Jack Winters, Ph.D. from the Chemical and Bio-Materials Engineering Department at Arizona State University in Phoenix. Their project has quantified neck movements and muscle activity in normal and injured subjects in an effort to better appreciate cervical spine injuries. Dr. Winters presented the team's work ("Relations between neck muscle activity and screw axis parameters of the head") during a session on Multi-Muscle Organization: Role of Neck Muscles in Posture and Head Orientation, which was chaired by Monohar Panjabi, Ph.D. of the Department of Surgical Orthopedics at Yale University.

John Triano, M.A., D.C. presented the results of his collaboration with Albert Schultz, Ph.D. of the University of Michigan. Their paper, entitled "Neck muscles response to manipulation of the cervical spine," quantified the forces produced during a cervical-break manipulation and the EMG response of the major neck muscles.

The conference had a profound effect on the chiropractic participants. According to Dr. Fuhr, "I think that the chiropractic profession has suffered tremendously from our traditional isolation from the mainstream of scientific debate represented by the university system. In the midst of a session of muscle modeling, as I listened to presenter after presenter, the lack of understanding and participation in scientific methods by our profession was hammered home, and I realized the

necessity of making basic engineering concepts (dynamics, statics, etc.) integral parts of the chiropractic sciences taught in our colleges. It hit me as never before that the people at this conference have the expertise we need in order to quantify the mechanical properties of the spine and its neural control mechanisms. Their knowledge and experience will enable us to test chiropractic theories against reality, and they, in turn, will benefit from our years of clinical experience." According to Dr. Osterbauer, "It is apparent that if we are to become and remain leaders in the field of manipulative health care, we need to emphasize biomechanics."

## World Chiropractic Congress April 30-May 5, 1991, Toronto, Canada.

A. Introduction -- World Federation of Chiropractic (WFC)

The World Federation of Chiropractic, established in 1988, is providing the unity and consensus the world chiropractic community has needed and desired. Its funding members are national associations of chiropractors in 46 countries worldwide, including both the American Chiropractic Association (ACA) and the International Chiropractic Association (ICA) in the United States.

The WFC has its secretariat in Toronto. Its constitution provides for governance by an executive council with representatives elected from seven world regions.

The president is Dr. Gary Auerback of Arizona who, as a member of ICA and ACA, has been a major force in promoting unity and growth in the international chiropractic community during the past ten years. The vice president is Dr. Christoph Diem of Switzerland, president of the European Chiropractors' Union. The secretary/treasurer is Dr. John Sweaney, past president and current executive director of the Australian Chiropractors' Association.

The WFC's goals include the promotion of international acceptance and licensure of chiropractic, and it is currently assisting pioneering chiropractors in countries such as Egypt, Iran, Jordan, Kuwait, the United Arab Emirates (Middle East), Japan, the Philippines, Republic of China, and Taiwan (Asia).

#### B. 1991 Congress in Toronto

This meeting, the first full Congress of the WFC, will be a significant event in the history of chiropractic. It will also be of great interest and value to individual DCs because it combines:

- Live, current reports on chiropractic in 46 nations worldwide -- from DC delegates from each country.
- Practical seminars and workshops on many aspects of chiropractic practice.
- Presentation of the best, current, chiropractic research from around the world. (A special issue of JMPT in the summer of 1991 will publish the proceedings.)
- Keynote lectures from the finest gathering of chiropractic and medical researchers ever assembled for one meeting. (As just one example, Alan Breen, D.C., the principle chiropractic researcher for the recent British MRC trial of chiropractic published in the British Medical Journal, will be there to review the results and answer your questions.)
- The most extensive exhibit hall of chiropractic and back care products and services you have seen -- possible because of the size of the meeting which is being organized jointly by the WFC and the American Back Society.

#### C Details of Congress Program

The Congress runs for six days and comprises three parts.

You can register for the full program (parts one to three) or the weekend WFC Symposium only (part three). It is anticipated that most registrants from North America will attend four days (parts two and three), most international registrants for the full six days.

1. WFC Assembly -- Tuesday/Wednesday, April 30-May 1 (Part 1)

This is the membership meeting of the WFC, to be attended by delegates from all member nations, but open also to Congress registrants as observers.

2. American Back Society (ABS) Spring Symposium -- Thursday/Friday, May 2-3 (Part 2)

This is a typical ABS Symposium, except that the number of chiropractic workshops is increased, and is the first to be held in Canada.

Coordinator for the ABS Symposium program in Toronto, is Scott Haldeman, D.C., M.D., Ph.D., who is both an ABS director and chairman, WFC Research Council. Chiropractic seminars are being directed by the Canadian Memorial Chiropractic College, Toronto.

3. WFC Symposium -- Saturday/Sunday, May 4-5 (Part 3)

The WFC Symposium runs from Saturday morning to Sunday afternoon, and details of the program are confirmed. Keynote speakers, all leading experts in the international health science community, are:

Chiropractic

Alan Breen, England, Clinical Examination David Cassidy, Canada, Sacroiliac Dysfunction Lynton Giles, Australia, Facet Syndrome Scott Haldeman, U.S.A., Research Trials Reed Phillips, U.S.A., Chiropractic Radiology John Triano, U.S.A., Biomechanics

Medical

Bjorn Rydevik, Sweden, Nerve Compression Akio Sato, Japan, Neurovisceral Reflexes Gunner Andersson, U.S.A., Occupational Back Pain Nicholas Bogduk, Australia, Spinal Anatomy Sam Wiesel, U.S.A., Differential Diagnosis of Spinal Disorders

In addition, there will be presentations of the finest current chiropractic research (ten minutes with five minutes discussion each) under the four categories of Basic Sciences, Diagnostic Sciences, Adjustive/Manipulative Sciences, and Special Interest (including epidemiology, history, and philosophy).

Allowances of \$5,000, \$3,000, and \$1,000 will be given for the three best papers, and the proceedings are to be published in a special issue of JMPT in summer 1991. Those interested in submitting research for presentation at the WFC symposium should complete and mail the coupon at the bottom of the Congress notice opposite.

#### D. Registration for Congress

#### 1. How to Register

Complete and return the coupon appearing at the bottom of the Congress notice opposite. You will then be sent registration forms and additional information on the program, accommodation, and Toronto.

Basic registration fees are:

Full Congress -- \$400 WFC Symposium -- \$300

(U.S. currency, Canadian for Canadian registrants).

There are concessions for early registration (by January 1, 1991), for new graduates and students. Registration fees entitle attendance at all business sessions; WFC and ABS receptions; WFC and ABS written proceedings; refreshments; breaks; and continental breakfasts (Thursday/Friday).

An outstanding value -- possible because the WFC and the ABS are pooling their resources to attract leading speakers and, in essence, giving two meetings for the price of one.

Facts that may surprise you about Toronto include:

- In a city that was once predominantly Anglo-Saxon, more children start school today without English as their first language. This is a truly multicultural city.
- The Italian community numbers over 500,000. A variety of ethnical groups leads to an excellent choice of restaurants.
- Toronto has the third highest theatre seat/population ratio in the world after London and New York.
- A city always known for its beauty, safety and efficiency now has the size, amenities, and energy that have made it one of the North America's most favored convention sites.
- E. Conclusion

Quite simply, spend a week in early Spring, 1991 in Toronto and return to your practice, knowledgeable and excited about the practice of chiropractic in the 1990s.

Dr. Philip Bolton to Take Up a Postdoctoral Position at Rockfeller University

Dr. Philip S. Bolton departed for the United States to take up a postdoctoral associate's position in neurophysiology at the Rockefeller University in New York City. He will work under Professor Victor Wilson, studying the spinal circuitry of neck reflexes.

Dr. Bolton was recently awarded a Ph.D. degree from the University of New South Wales for his work on "The Central Connection of Primary Afferents from the Neck."

The Australian Spinal Research Foundation has awarded Dr. Bolton a \$7,000 travel grant to take up the position.

Dr. Bolton is the second Australian chiropractor to obtain a Ph.D. Dr. Bolton's recognition by Rockfeller University in awarding him the postdoctoral associateship is a great credit to himself

### and the Australian chiropractic profession.

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