WELCOME & INTRODUCTION

Chiropractic For A New Normal

2021 marks the 30th anniversary of the World Federation of Chiropractic’s Biennial Congress. Since our inaugural meeting in Toronto back in 1991, we’ve come a long way. This year, our 16th Biennial Congress, reflects an unprecedented time in our history. COVID-19 has impacted every aspect of our lives. It has presented challenges for clinicians, educators, students, and scientists within the chiropractic profession. It has also acted as a catalyst for inspiration, innovation, and opportunity.

As we emerge from the pandemic, we find ourselves in a new normal. What seems certain is that the delivery of healthcare has evolved, new methods will become accepted practices, and emerging evidence will drive methods of learning, communication, and care delivery. Patient expectations will also have changed, and expectations of evidence-based, people-centered, interprofessional and collaborative practice will drive change in the environment of this new normal.

Our 2021 Biennial Congress will showcase the leading global advances in chiropractic. With contributors from around the globe, our theme of Chiropractic For A New Normal will showcase leading contemporary issues, with outstanding keynote speakers, stimulating panel debates, groundbreaking research and inspiring workshops.

Past attendees will know that the WFC Congress has something for everyone. Whether you’re a student, early-career clinician, longstanding practitioner, educator or research scientist, our congresses uniquely bring our global community together.

This year’s event is 100% virtual and we’re partnering with the best in the business. Parker Seminars have developed a worldwide reputation for delivering outstanding online events and we’re proud to be working collaboratively to present an unmissable experience.

Richard Brown DC, LL.M, FRCC, FICC
Secretary-General
World Federation of Chiropractic
SESSION A: NEW NORMAL - THE GLOBAL NEED FOR PEOPLE-CENTEREDNESS

08:00 Opening and welcoming address
Carlos AYRES, President, WFC
Richard BROWN, Secretary-General, WFC

08:20 Keynote address:
Opportunities to Lead in a People-Centered World
Nakela COOK, Executive Director, PCORI (USA)

09:00 Chiropractic's Role in Community Healthcare: the Hands On Health Experience
Joan VAN ROTTERDAM, Chair, Hands on Health (Australia)

09:20 Kindness is a Blockbuster Drug!
Jeremy HOWICK, Oxford Empathy Programme, University of Oxford (UK)

09:40 Universal Health Coverage: Serving the Underserved
Mufudzi CHIHAMBAKWE, Spine Health Africa (Botswana)
Steven PASSMORE, Faculty of Kinesiology & Recreation Management University of Manitoba (Canada)

10:00 REFRESHMENT BREAK, TRADE EXHIBITION & DIGITAL POSTER VIEWING

SESSION B: MANY FACES, ONE VOICE - DEI IN ACTION

10:40 Panel Discussion: Addressing Diversity, Equity & Inclusion in Chiropractic
Jamii BUSARI (Chair), Dean, Horatio Oduber Hospital (Aruba)
Micheala EDWARDS, President, American Black Chiropractors Association (USA)
Philippa OAKLEY, British Chiropractic Association (United Kingdom)
David PEEACE, Past Chair, Canadian Chiropractic Association (Canada)
Ranen RAMBRIJ, Private Practice (United Arab Emirates)

11:40 REFRESHMENT BREAK, TRADE EXHIBITION & POSTER VIEWING

*All times in Central Daylight Time U.S. (UTC -5)
12:00  TRACK 1: ORIGINAL RESEARCH

Research Platforms I

Chair: Katie POHLMAN, Director of Research, Parker University (USA)

James WHEDON
Utilization of chiropractic care reduces use of prescription opioids among older medicare beneficiaries with spinal pain

Matthew FERNANDEZ
GLA:D Back Australia: a feasibility study for implementation

Carlo AMMENDOLIA
Nonoperative treatment for lumbar spinal stenosis with neurogenic claudication. An updated systematic review

Craig MOORE
The impact and public health response of chiropractors to the COVID-19 pandemic: A survey across four continents

Alan JENKS
Spinal manipulative therapy in older adults with chronic low back pain: An individual participant data meta-analysis

Michele MAIERS
Association between psychosocial parameters and response to chiropractic care among older adults with chronic back pain

TRACK 2: PREVIOUSLY PUBLISHED RESEARCH

Research Platforms II

Chair: Sidney RUBINSTEIN, Assoc. Professor, Vrije Universiteit Amsterdam (Netherlands)

Kris ANDERSON
Best practices for chiropractic management of patients with chronic musculoskeletal pain: a clinical practice guideline

Felipe DUARTE
Impulse attenuates nociception and oxidative stress in the spinal cord and sciatic nerve of a rat model of neuropathic pain

Lise HESTBAEK
Effectiveness of chiropractic manipulation versus sham manipulation for recurrent headaches in children aged 7-14 years. A randomised clinical trial

*All times in Central Daylight Time U.S. (UTC -5)
Hazel JENKINS
The association between guideline adherent radiographic imaging by chiropractic students and the diagnostic yield of clinically significant findings

Katherine POHLMAN
Active versus passive surveillance adverse event reporting in a pediatric chiropractic care setting: a cluster randomized controlled trial

Michael SCHNEIDER
Risk Factors Associated with Transition from Acute to Chronic Low Back Pain in US Patients Seeking Primary Care

Patricia TAVARES
Distance management of spinal disorders during the COVID-19 pandemic and beyond: evidence-based guides from the Global Spine Care Initiative

Track 3: CLINICAL SCIENCE
Essential Pain Science for Chiropractors

Romy PARKER, Dept. Anaesthesia & Perioperative Medicine, University of Cape Town (South Africa)
Demetry ASSIMAKOPOULOS, Clinical Coordinator, Comprehensive Integrated Pain Program, University of Toronto (Canada)

Track 4: PUBLIC HEALTH
Chiropractors as Public Health Advocates

Claire JOHNSON, Chair, WFC Public Health Committee (USA)
Rebekah WILKS, World Spine Day Committee (USA)
Yi Kai WONG, Chiropractic Programme Director, International Medical University (Malaysia)

*All times in Central Daylight Time U.S. (UTC -5)*
13:00

**TRACK 5: ORIGINAL RESEARCH**

*Research Platforms III*

**Chair:** Marc-André BLANCHETTE, University of Quebec at Trois Rivieres (Canada)

**Casper NIM**

The temporal stability of self-reported back pain trajectories

**Lyndon AMORIN-WOODS**

The role of chiropractic care in providing health promotion and clinical preventive services for adult patients with musculoskeletal pain

**Felipe DUARTE**

Short-term effects of spinal manipulation with different force-magnitudes on blood biomarkers of oxidative stress and inflammation: A pilot study

**Stephanie ALEXOPULOS**

Tracking clinical care among patients with chronic low back pain: the utility of performance-based measures of physical function and impairment

**Carol Ann WEIS**

Best practices recommendations for chiropractic care for pregnant and postpartum patients: results of a consensus process

**Anna-Marie ZIEGLER**

Learning the neurobiology of pain: A scoping review of pain education from an instructional design perspective

**TRACK 6: ORIGINAL RESEARCH**

*Research Platforms IV*

**Chair:** Michael SCHNEIDER, University of Pittsburgh (USA)

**Dorthe Schoeler ZIEGLER**

Inequality in the treatment of disc herniation? Socio-demographic characteristics of patients undergoing first-time, single-level, simple lumbar discectomy

**Hazel JENKINS**

The effects of diagnostic imaging on clinical outcomes in low back pain patients presenting for chiropractic care: matched observational study

*All times in Central Daylight Time U.S. (UTC -5)*
Elisa DUBUC
Chiropractic techniques and treatment modalities included in academic programs: a survey of accredited chiropractic colleges

Andrew ROMANELLI
GLA:D® at the Canadian Memorial Chiropractic College: a description of implementation and participant outcomes

Maliheh HADIZADEH
Identifying predictors of the timing of successful low back pain treatment response: A secondary RCT analysis

Lindsay GORRELL
Kinematics of the head and associated vertebral artery strains during the thrust phase of high-velocity, low-amplitude cervical spine manipulation

TRACK 7: NEUROLOGY
Emerging Themes in Functional Neurology
Matthew ANTONUCCI, Plasticity Brain Centers, Florida (USA)
Igor DIJKERS, Chair, European Academy of Chiropractic (Netherlands)

TRACK 8: INNOVATION
Spine Care Telehealth: Getting Started with the New Normal
Bart GREEN, Stanford Health Care, California (USA)
Scott HALDEMAN, World Spine Care (USA)

14:00 OPEN DIGITAL POSTER VIEWING

*All times in Central Daylight Time U.S. (UTC -5)
SESSION C : CHIROPRACTORS AS GLOBAL TEAM PLAYERS

08:00  Keynote Address
There and Back Again: An Overview of Biopsychosocial Approaches for Spine Pain
Steven GEORGE, Director of Musculoskeletal Medicine, Duke University (USA)

08:40  Now More Than Ever: A Global Strategy of Musculoskeletal Health
Andrew BRIGGS, Curtin University, Global Alliance for Musculoskeletal Health (Australia)
Deborah KOPANSKY-GILES, Unity Health Care, University of Toronto, Canadian Memorial Chiropractic College, Global Alliance for Musculoskeletal Health (Canada)

09:00  Chiropractors Within the National Sports Care Framework
Raul CARILLO RODRIGUEZ (Mexico)

09:20  Interprofessional Care: Only Team Players Need Apply
Anthony LISI, Chiropractic Program Director, Veterans Health Administration (USA)

09:40  REFRESHMENT BREAK, TRADE EXHIBITION & DIGITAL POSTER VIEWING

SESSION D : SEEKING UNITY THROUGH COLLABORATION

10:00  Panel discussion: Shared Values - Unifying Principles in Chiropractic
William MORGAN (Chair), President Parker University (USA)
Martin CAMARA, President, Association of Professional Chiropractors of the Philippines (Philippines)
Selina SIGAFOOSE-JACKSON, Chair, International Chiropractors Association (USA)
Hayden THOMAS, President New Zealand Chiropractors Association (New Zealand)
Debbie WRIGHT, Chair, Canadian Chiropractic Association (Canada)

11:00  WFC David Chapman-Smith Honor Awards
Richard BROWN, WFC Secretary-General (United Kingdom)
David CHAPMAN-SMITH, Past WFC Secretary-General (Canada)

11:20  REFRESHMENT BREAK, TRADE EXHIBITION & DIGITAL POSTER VIEWING

*All times in Central Daylight Time U.S. (UTC -5)
12:00  

**TRACK 1: ORIGINAL RESEARCH**  

*Research Platforms V*  

**Chair:** Keserì PADAYACHY, Durban University of Technology (South Africa)  

**Casper NIM**  
The need for specificity when applying spinal manipulation: Myth or reality? A systematic review  

**Annemarie DE ZOETE**  
Exercise for treatment of acute non-specific low back pain: update of the Cochrane review  

**Morgan PRICE**  
Systematic review of guideline-recommended medications prescribed for treatment of mechanical low back pain  

**Aurelie MARCHAND**  
Entrustable professional activities; the next step in competency-based education? Five EPAs in chiropractic paediatric education  

**Melissa NEAVE**  
Characteristics of chiropractic paediatric practice: secondary analysis of the COAST and O-COAST  

**Jesper HJERSTRAND**  
The Nordic Maintenance Care Program: Patient experience of maintenance care - a qualitative study

**TRACK 2: ORIGINAL RESEARCH**  

*Research Platforms VI*  

**Chair:** Sheng Hui KIOH, International Medical University (Malaysia)  

**Christian MANANSALA**  
Predictors of non-pharmacological, non-surgical treatment utilization prior to thoracolumbar spine surgery in Manitoba: A Canadian Spine Outcomes Research Network study  

**Andreas EKLUND**  
Maintain, a short clinical instrument for the identification of dysfunctional patients suitable for Maintenance Care  

**Christine GOERTZ**  
Managing pain better: strategies to advance integrated pain management programs

*All times in Central Daylight Time U.S. (UTC -5)*
Peter EMARY
Quality of reporting in chiropractic mixed methods research: a methodological review

Anneke VERBEECK
Spinal manipulative therapy for acute and subacute low back pain: update of the Cochrane review

Stacie SALSUBY
Adapting a clinical trial protocol to support virtual chiropractic care delivery and research: planning responses to the evolving COVID-19 pandemic

TRACK 3: RADIOLOGY
Black, White and Shades of Gray: A Contemporary Approach to Chiropractic Imaging
Marshall DELTOFF, Chiropractic Radiologist, Barcelona College of Chiropractic (Spain)
Cliff TAO, Chiropractic Radiologist (USA)

TRACK 4: REGULATION
Chiropractic Regulation: Through Covid-19 and Beyond
Tim COOPER (Chair), New Zealand Chiropractic Board (New Zealand)
Nick JONES, Chief Executive & Registrar, General Chiropractic Council (United Kingdom)
Wayne MINTER, President, International Chiropractic Regulatory Society (Australia)
Leonard WONG, Hong Kong Chiropractors Council (Hong Kong)
Chris YELVERTON, Chair, Allied Health Professions Council of South Africa (South Africa)

13:00
TRACK 5: ORIGINAL RESEARCH
Research Platforms VII
Chair: Dana LAWRENCE, Parker University (USA)
Simon WANG
Discomfort, pain and stiffness: what do these terms mean to patients? A cross-sectional survey with lexical and qualitative analysis
Anke LANGENFELD
Back muscle perfusion and oxygenation during isometric back muscle exercise in patients with chronic low back pain: A cross-sectional study

*All times in Central Daylight Time U.S. (UTC -5)
Marc-André BLANCHETTE
The association between characteristics of Danish chiropractors and number of referred patients from general practitioners—a cross-sectional study

Katherine POHLMAN
Supporting a culture of transparency and trust—results of an active surveillance reporting system from spinal manipulation therapy providers

Michelle HOLMES
Doing our best for patient safety: a qualitative analysis of provider perspectives from community-based settings offering spinal manipulative therapy

Stephen PERLE
Evaluation of United States chiropractic professional subgroups: a survey of randomly sampled chiropractors

**TRACK 6: ORIGINAL RESEARCH**

*Research Platforms VIII*

**Chair: Stacie SALSBURY, Palmer College of Chiropractic (USA)**

Brian COLEMAN
Patterns of low back pain visits by patients receiving on-station healthcare in the Veterans Health Administration

Jacqueline RIX
Usability Testing as an Aid to Design a Person-Centred Randomised Clinical Trial

Robert WALLACE
Benefits and challenges of going virtual: the future of research and clinical approaches to musculoskeletal care in US military Veterans

William BRANN
The effectiveness of cervical spine manipulation on neck muscle activity, force output, pain and disability in participants with cervicogenic headache

Brian GLEBERZON
The current and future status of the chiropractic profession:A thematic analysis of interviews of 30 influential stakeholders

Anthony LISI
Assessing mechanisms of chiropractic care delivery in the US Veterans Health Administration

*All times in Central Daylight Time U.S. (UTC -5)*
TRACK 7: PEDIATRICS

Pediatric Care in Chiropractic: Evaluating the Evidence
Lisa HESTBAEK, University of Southern Denmark (Denmark)
Katie POHLMAN, Director of Research, Parker University (USA)
Anna PAPADOPOULOU, Private Practice, Nicosia (Cyprus)

TRACK 8: CLINICAL PRACTICE

Unlocking the Mysteries of the TMJ
Alex VIDAN, Private Practice, St Louis (USA)

14:00 OPEN DIGITAL POSTER VIEWING

*All times in Central Daylight Time U.S. (UTC -5)
SESSION E: ADAPTING HEALTHCARE TO A NEW NORMAL

08:00  Gen Z: How Digital Natives Are Moving the Needle in Chiropractic
       Wren BURTON, Osher Centre for Integrated Health (USA)

08:20  The WHO Global Transformation and Key Lessons from COVID-19
       Meri ROBINSON NICOL, Unit Head, Process Efficiency Unit, World Health Organization

08:40  Adding Life to Years: Chiropractic's Contribution to Healthy Ageing
       Katie DE LUCA, Macquarie University (Australia)

09:00  Keynote address:
       Why the Decade of Healthy Ageing is Important For Us All
       Yuka SUMI, Ageing and Health Unit, World Health Organization

09:40  REFRESHMENT BREAK, TRADE EXHIBITION & DIGITAL POSTER VIEWING

SESSION F: THE FUTURE IN OUR HANDS

10:20  Knowledge Transfer in Chiropractic: Power, Advancement, Currency
       Shawn THISTLE, RRS Education (Canada)

10:40  Panel discussion
       Future Focused: Chiropractic in a Post-COVID World
       Clay McDONALD (Chair), President, Logan University, Missouri (USA)
       Keiron BOOSI, Director External Affairs, WCCS (South Africa)
       Anthony COXON, President, Australian Chiropractors Association (Australia)
       Alison DANTAS, CEO, Canadian Chiropractic Association (Canada)
       Lone KOUSGAARD JORGENSEN, President, Danish Chiropractic Association (Denmark)

11:40  REFRESHMENT BREAK, TRADE EXHIBITION & DIGITAL POSTER VIEWING

*All times in Central Daylight Time U.S. (UTC -5)*
SESSION G: WFC RESEARCH AWARDS: THE VOICES OF SCIENCE

12:00  WFC NCMIC Research Awards
       Christine GOERTZ, Chair, WFC Research Committee
       Scott Haldeman Award for Outstanding Research
       NCMIC Louis Sportelli Research Award (First Prize)
       NCMIC Louis Sportelli Research Award (Second Prize)
       Early Investigator Award

       WFC IBCE Poster Awards

13:00  The Biennial John Sweaney Lecture
       Michele MAIERS, President, American Chiropractic Association (USA)

13:40  Preview of 17th WFC Biennial Congress, Gold Coast, Queensland, Australia
       2023 WFC Congress Organizing Team

13:50  Summary and Closing Remarks
       Carlos AYRES, President, World Federation of Chiropractic (Peru)

14:00  END OF CONGRESS

ON-DEMAND ACCESS

In conjunction with our friends at Parker Seminars, we are offering Congress delegates On-Demand access to Chiropractic For A New Normal until December 31, 2021.

*All times in Central Daylight Time U.S. (UTC -5)
THE FOLLOWING POSTERS HAVE BEEN ACCEPTED FOR PRESENTATION AT THE 16TH WFC BIENNIAL CONGRESS

Roland Morris, Oswestry, and Quebec Back Pain Indexes: Which has better Measurement Properties in Older Adults with Low Back Pain?

Alan JENKS
A Delphi study to identify research priorities to inform a research agenda for Canadian sports chiropractors.

Alexander LEE
Chiropractic trainees adherence to imaging guidelines and utilization of diagnostic imaging for a new episode of low back pain.

Ali SMITH

Alice CADE
Utilization of Telehealth services for paediatric and adult musculoskeletal care in a chiropractic practice.

Amanda STEVENS
Chiropractic faculty and students’ perceptions of an abrupt transition to online teaching during the COVID-19 pandemic: a descriptive study.

Amberly FERGUSON
The effect of spinal manipulative therapy on pain and heart rate variability in patients with persistent or recurrent neck pain.

Anders GALAASEN BAKKEN
Does induced fatigue alter dynamic balance in athletes? A systematic review.

Andrew ROMANELLI
Do X-rays for spinal pain in patients receiving chiropractic care change patient outcomes? A pilot randomised controlled trial.

Anika YOUNG
Spinal pain in employees exposed to abusive supervision: Evidence of a sex and CRHR1 CTC haplotype interaction.

Ann-Christin SANNES
What abilities do students need to safely care for paediatric patients? A competency-based chiropractic paediatric curriculum.

Aurelie MARCHAND

Rapid deployment of chiropractic telehealth at 2 worksite health centers in response to the covid-19 pandemic: Observations from the field

Bart GREEN

An international stakeholder survey of the role of chiropractic qualifying examinations: A qualitative analysis

Bart GREEN

Unemployment among Southeast Minnesota refugees: Does low back pain play a role?

Benjamin HOLMES

A Randomized Control Trial on The Effect of Upper neck Manipulation on Head and Neck Proprioception

Bernadette MURPHY

PROMs needed: results of a secondary data analysis of patient-reported outcomes measures (PROMs) used in manual therapy trials with children

Beth CARLEO

Using natural language processing to investigate pain assessment in US Veterans Health Administration chiropractic visits

Brian COLEMAN

Comparing characteristics and outcomes of low back pain sufferers managed exclusively with conservative care vs other treatments

Brian ANDERSON

The Ontario Chiropractic Association's Evidence-Based Framework Advisory Council: A project to enhance patient care

Brian GLEBERZON

Adverse events from spinal manipulations in the pregnant and postpartum periods: a systematic review and update

Carol Ann Weis

Referral Patterns and Perceptions of General Practitioners towards Chiropractic Care in the Madibeng Municipal District, South Africa

Caroline HAY

Immediate changes to lumbosacral dural regions upon simultaneous bilateral compression to the parietooccipital (asterion) cranial region: A dissection study

Marc PICK

A survey of chiropractic students or recent graduates on their experiences in chiropractic college adjusting lab or class.

Charles BLUM
Attitudes towards limited drug prescription rights: A survey of South African chiropractors
Christopher YELVERTON

Christopher YELVERTON

Response of Practicing Chiropractors during the Early Phase of the COVID-19 Pandemic: A Descriptive Report
Claire JOHNSON

Manipulative and manual therapies in the management of patients with prior lumbar surgery: A systematic review
Clinton DANIELS

Veteran response to dosage in chiropractic therapy (VERDICT): study protocol of a pragmatic randomized trial for chronic low back pain
Cynthia LONG

Adverse events following the first chiropractic visit in a corporate environment
Daniel FACCHINI

Patient experience and satisfaction during chiropractic care: A Systematic Review of the Literature
Dave NEWELL

Does spinal pain in the elderly associate with depressed cognitive function? A secondary analysis of the Danish Twins Registry database
David BYFIELD

The effect of active scapular correction, cervical manipulation or a combination on pain and pain threshold with chronic neck pain
Dirkie LANDMAN

Teaching, learning, and patient care in a chiropractic teaching clinic during early stages of the COVID-19 pandemic in California, USA.
Donna H ODIERNA

Development of a consent procedure using a multi-modal delivery for a low back pain study within the VA Healthcare System
Anna WALDEN-COBB

Knowledge, awareness and attitudes of the Coronavirus (COVID-19) pandemic in undergraduate chiropractic students at a South African University
Fatima ISMAIL

Assessing attitudes of patient-centered care among chiropractic students in a South African University
Fatima ISMAIL

Characteristics of Virtual and Face-to-Face Chiropractic Visits in the Veterans Health Administration During the COVID-19 Pandemic
Gregory ROYTMAN
Chiropractic spinal manipulation increases the corticomotor excitability of lower limb muscle in people with chronic stroke.

**Imran KHAN NIAZI**

Directing specific adjutive thrust towards a chiropractic subluxation significantly alters sensorimotor integration compared to directing thrust at a non-subluxated vertebrae.

**Imran KHAN NIAZI**

Stakeholder Involvement in the Development of Trial Material for a Clinical Trial.

**Jacqueline RIX**

Cross-cultural adaptation and validation of the Finnish version of Central Sensitization Inventory and its relationship with dizziness and postural control

**Jani MIKKONEN**

The association between chiropractors’ view of practice and patient- and treatment-level characteristics in Ontario, Canada: A cross-sectional study

**Jessica WONG**

Adoption of Telemedicine During the COVID-19 Pandemic: Perspectives of Primary Healthcare Providers

**Joe LINTZ**

Identification of Master Patient Index (MPI) Record Challenges from Healthcare Professionals’ Perspectives

**Joe LINTZ**

Changes in intervertebral motion sharing after cervical spine manipulation are minimal and not correlated with patient-reported outcomes

**Jonathan BRANNEY**

The crural interosseous membrane re-visited: part II, new biomechanical concepts

**Joseph MORLEY**

Discomfort experienced during a standard and modified flexed lumbopelvic manipulation setup position: A two-part randomized crossover study

**Joshua PLENER**

A literature review of HC-PAIRS as a measure of attitudes, beliefs, and recommendations for chronic back pain patients

**Ryan D MULLER**

Piloting algorithms to identify a trial of chiropractic care for low back pain in Veterans Affairs electronic health record data

**Kelsey CORCORAN**

Are patient-centred care interventions effective for the management of chronic musculoskeletal conditions in adults? A systematic review

**Kent STUBER**
Chiropractic research into patient-centred care: a narrative review of the literature

Kent STUBER

Identification and management of patients in chiropractic clinics with hypertension or pre-diabetes to promote awareness and improve care coordination: pilot

Kris ANDERSON

Evaluating Students’ Clinical Research Literacy Attitudes, Confidence and Knowledge at the beginning and end of a Doctor of Chiropractic Program

Krista WARD

Profiling headaches in a Danish chiropractic cohort. Protocol for an upcoming project

Kristina DISSING

Self-reported management of patients with low back pain and adherence to practice guidelines by Dutch and Belgian chiropractors

Lobke DE LA RUELLE

Satisfaction with flipped learning in a chiropractic university program: a survey of students and faculty.

Luke HANSEN

Agreement with the International Clinical and Professional Chiropractic Education Position Statement: a survey of UQTR chiropractic students

Stephanie WOUTERS

Chiropractic care for patients with a cancer diagnosis: The views of members of the Evidence based Chiropractic Facebook group.

Maria LAOUDIKOU

Patients with cancer. Is there a role for chiropractic?

Maria LAOUDIKOU

Characterization of thoracic spinal manipulation and mobilization forces in older adults

Martha Funabashi

Quantification of forces at the clinician-patient and patient-table interfaces during thoracic spinal manipulation in asymptomatic adults

Thomas MURPHY

Patient satisfaction at the Durban University of Technology Chiropractic Day Clinic using a pre-validated survey

Mary Ann RUTHNAM

An international Delphi study to identify sports chiropractic global research priorities

Melissa BELCHOS

Factors associated with recording the exercise vital sign (EVS) in the electronic health records for patients in chiropractic teaching clinics
DIGITAL POSTERS

Chris DEGRAUW
Stratified care to prevent chronic low back pain in high-risk patients: TARGET trial. A multi-site pragmatic cluster randomized trial.

Michael SCHNEIDER
Concussion Knowledge Among North American Chiropractors

Mohsen KAZEMI
A Clinical Crossover Trial of the Effect of Manipulative Therapy on Pain and Range of Motion of the Painful Hip

Mohsen KAZEMI
A scoping review investigating chiropractic and manual therapy as a treatment for migraine

Peter TUCHIN
Do chiropractic educational institutions provide adequate training in mental health?

Peter TUCHIN
A proof-of-concept study assessing thoracolumbar fascia mobility using musculoskeletal ultrasound in persons with chronic low back pain

Robert VINING
Educator’s Learning Alignment Instrument (ELAI): A tool to assess aligned learning concepts within college courses

Robert VINING
Immediate effect of lower extremity joint manipulation on a lower extremity somatosensory illusion: a preliminary, randomized, crossover clinical trial

Shannon SCHEUREN
Utilization of radiographs among chiropractic interns in a chiropractic teaching clinic

Sheng Hui KIOH
Description of patient's profile and characteristics presenting to a chiropractic teaching clinic in Malaysia

Sheng Hui KIOH
Veteran perceptions of a single-arm pilot of chiropractic care for low back pain: a qualitative analysis

Stacie SALSBURY
Defining chiropractic professional identity: A concept analysis

Tanja GLUCINA
Knowledge, Perceptions and Understanding of Telemedicine Amongst Chiropractors in South Africa in Response to COVID-19

Tristan SCHUT
Microbial chiropractic treatment table hygiene monitoring in a training

Mark KINGHAM
Microbial simulation as education aid for surface hygiene training of Chiropractic interns

Marlo SWANEPOEL

ATP testing to monitor Chiropractic treatment tables hygiene

Raeesa SARLIE

Health literacy modules for chiropractic education

Valerie UBBES

Relationship Between Fourth and Fifth Year International Medical University Dental Students’ Ergonomic Risk Factors and Musculoskeletal Symptoms.

Yi Kai WONG

The Public Awareness of the Traditional and Complementary Medicine Law Governing Chiropractic in Klang Valley, Malaysia.

Yi Kai WONG

The Effectiveness of Orthotics in Reducing Excessive Pronation (Flat Feet) In School Children Between 7 to 10 Years Old

Ying Wei FONG

The validity of telehealth-based evaluations in musculoskeletal assessment and diagnosis in people with musculoskeletal disorders. - A structured narrative review

Zachary WILLIAMS

WE GRATIFY ACKNOWLEDGE THE WORK OF BRIGHTHALL INC. AND THE 2021 PEER REVIEW PANEL IN ENSURING ANOTHER OUTSTANDING WFC SCIENTIFIC MEETING

Christine GOERTZ (Chair) (USA)
Marc-André BLANCHETTE (Canada)
Mitchell HAAS (USA)
Scott HALDEMAN (USA)
Steen HARSTED (Denmark)
Anne JENSEN (Australia)
Imran KHAN NIAZI (New Zealand)
Sheng Hui KIOH (Malaysia)
Michele MAIERS (USA)

Casper NIM (Denmark)
Keseri PADAYACHY (South Africa)
Isabelle PAGE (France)
Steven PASSMORE (Canada)
Katherine POHLMAN (USA)
Sidney RUBINSTEIN (Netherlands)
Stacie SALSBURY (USA)
Michael SCHNEIDER (USA)
Matthew ANTONUCCI (USA)
Chief Clinical Officer, Plasticity Centers, Orlando, Florida
Emerging Themes in Functional Neurology
1:00 - 2:00 CDT, Thursday, September 23, 2021

Demetry ASSIMAKOPOULOS (Canada)
Clinical Coordinator, Integrated Pain Program, University of Toronto
Essential Pain Science for Chiropractors
12:00 - 1:00 CDT, Thursday, September 23, 2021

Carlos AYRES (Peru)
President, World Federation of Chiropractic
Opening address
08:00 - 08:20, Thursday, September 24, 2021

Marc-Andre BLANCHETTE (Canada)
Assistant Professor, Université du Québec à Trois-Rivières, Trois-Rivières
Research Platforms III - Original Unpublished Research
1:00 - 2:00 CDT, Thursday, September 24, 2021

Keiron BOOSI (South Africa)
Former Director of External Affairs, World Congress of Chiropractic Students
Future Focused: Chiropractic in a Post-COVID World
20:40 - 11:40 CDT, Saturday, September 25, 2021

Andrew BRIGGS (Australia)
Professor, Curtin University, Global Alliance for Musculoskeletal Health
Now More Than Ever: A Global Strategy for Musculoskeletal Health
08:40 - 09:00 CDT, Friday, September 24, 2021

Richard BROWN (United Kingdom)
Secretary-General, World Federation of Chiropractic
Opening address
08:00 - 08:20 CDT, Thursday, September 23, 2021
Wren BURTON (USA)
Fellow, Osher Center for Integrated Health
Gen Z: How Digital Natives are Moving the Needle in Chiropractic
08:00 - 08:20, Saturday, September 25, 2021

Jamii BUSARI (Aruba)
Dean, Herato Odubai Hospital, Aruba
Addressing Diversity, Equity and Inclusion in Chiropractic
10:40 - 11:40 CDT, Thursday, September 23, 2021

Martin CAMARA (Philippines)
President, Association of Professional Chiropractors of the Philippines
Shared Values: Unifying Principles in Chiropractic
10:00 - 11:00 CDT, Friday, September 24, 2021

Raúl CARILLO RODRÍGUEZ (Mexico)
National Director for Sport, Mexico
Chiropractors Within the National Sports Care Framework
09:00 - 09:20 CDT, Friday, September 24, 2021

David CHAPMANN-SMITH (Canada)
Immediate Past Secretary-General, World Federation of Chiropractic
The WFC David Chapman-Smith Honor Awards
11:00 - 11:20 CDT, Friday, September 24, 2021

Mufudzi CHIHAMBWE (Botswana)
Co-Founder, Spine Health Africa
Universal Health Coverage: Serving the Underserved
09:40 - 10:00, Thursday, September 23, 2021
Nakela COOK (USA)
Executive Director, Patient Centered Outcomes Research Institute (PCORI)
Opportunities to Lead in a People-Centered World
08:20 - 09:00, Thursday, September 23, 2021

Tim COOPER (New Zealand)
Chair, New Zealand Chiropractic Board
Chiropractic Regulation: Through COVID-19 and Beyond
12:00 - 1:00 EDT, Friday, September 24, 2021

Anthony COXON (Australia)
President, Australian Chiropractors Association
Future Focused: Chiropractic in a Post-COVID World
20:40 - 21:40 EDT, Saturday, September 25, 2021

Alison DANAS (Canada)
CEO, Canadian Chiropractic Association
Future Focused: Chiropractic in a Post-COVID World
20:40 - 21:40 EDT, Saturday, September 25, 2021

Katia DE LUCA (Australia)
Post Doctoral Research Fellow, Macquarie University, Sydney, Australia
Adding Life to Years: Chiropractic’s Contribution to Healthy Ageing
08:40 - 09:00 EDT, Saturday, September 25, 2021

Marshall DELTOF (Isreal)
Chiropractic Radiologist, Barcelona College of Chiropractic, Spain
Black, White and Shades of Grey: A Contemporary Approach to Chiropractic Imaging
12:00 - 1:00 EDT, Friday, September 24, 2021

Igor DIJKERS (Netherlands)
Chair, European Academy of Chiropractic
Emerging Themes in Functional Neurology
1:00 - 2:00 EDT, Thursday, September 23, 2021
SPEAKER FACULTY

Michaela EDWARDS (USA)
President, American Black Chiropractors Association
Addressing Diversity, Equity and Inclusion in Chiropractic
10:40 - 11:40 CDT, Thursday, September 23, 2021

Steven GEORGE (USA)
Director of Musculoskeletal Medicine, Duke University, USA
There and Back Again: An Overview of Biopsychosocial Approaches for Spine Pain
08:00 - 08:40, Friday, September 24, 2021

Christina GENTZ (USA)
Chair, WFC Research Committee
2021 WFC Research Awards
12:00 - 1:00 CDT, Saturday, September 25, 2021

Steven GEORGE (USA)
Director of Musculoskeletal Medicine, Duke University, USA
There and Back Again: An Overview of Biopsychosocial Approaches for Spine Pain
08:00 - 08:40, Friday, September 24, 2021

Bart GREEN (USA)
Stanford Health Care, California, USA
Spine Care Telehealth: Getting Started With The New Normal
1:00 - 2:00, Thursday, September 23, 2021

Scott HALDEMAN (USA)
President, World Spine Care, USA
Spine Care Telehealth: Getting Started With The New Normal
1:00 - 2:00, Thursday, September 23, 2021

Lise HESTBAEK (Denmark)
Professor, University of Southern Denmark, Odense, Denmark
Pediatric Care in Chiropractic: Evaluating the Evidence
1:00 - 2:00 CDT, Friday, September 24, 2021

Jeremy HOWICK (United Kingdom)
Director, Oxford Empathy Programme, Faculty of Philosophy, University of Oxford
Kindness is a Blockbuster Drug
09:20 - 09:40, Thursday, September 23, 2021
Claire JOHNSON (USA)
Chair, WFC Public Health Committee
Chiropractors as Public Health Advocates
12:00 - 1:00 CDT, Thursday, September 23, 2021

Nick JONES (United Kingdom)
Chief Executive and Registrar, General Chiropractic Council (UK)
Chiropractic Regulation: Through COVID-19 and Beyond
12:00 - 1:00 CDT, Friday, September 24, 2021

Sheng Hui KIOH (Malaysia)
Research Department, International Medical University, Malaysia
Research Platforms VI - Original Unpublished Research
12:00 - 1:00 CDT, Friday, September 24, 2021

Deborah KOPANSKY-GILES (Canada)
Executive Committee Member, Global Alliance for Musculoskeletal Health
Now More Than Ever: A Global Strategy for Musculoskeletal Health
08:40 - 09:00 CDT, Friday, September 24, 2021

Lone KOUSGAARD JOERGENSEN (Denmark)
President, Danish Chiropractic Association
Future Focused: Chiropractic in a Post-COVID World
20:40 - 11:40 CDT, Saturday, September 25, 2021

Dana LAWRENCE (USA)
Associate Provost of Research and Education, Parker University, Dallas, Texas
Research Platforms VII - Original Unpublished Research
1:00 - 2:00 CDT, Friday, September 24, 2021

Anthony LISI (USA)
Chiropractic Program Director, Veterans Health Administration, USA
Interprofessional Care: Only Team Players Need Apply
09:20 - 09:40, Friday, September 24, 2021
Michele MAIERS (USA)
President, American Chiropractic Association

*The John Sweaney Lecture*
1:00 - 1:40 CDT, Saturday, September 25, 2021

Clay MCDONALD (USA)
President, Logan University, Missouri, USA

*Future Focused: Chiropractic in a Post-COVID World*
20:40 - 11:40 CDT, Saturday, September 25, 2021

Wayne MINTER (Australia)
President, International Chiropractic Regulatory Society

*Chiropractic Regulation: Through COVID-19 and Beyond*
12:00 - 1:00 CDT, Friday, September 24, 2021

William MORGAN
President, Parker University, Dallas, Texas, USA

*Shared Values: Unifying Principles in Chiropractic*
10:00 - 11:00 CDT, Friday, September 24, 2021

Philippa OAKLEY (United Kingdom)
Communications Committee Member, British Chiropractic Association

*Addressing Diversity, Equity and Inclusion in Chiropractic*
10:40 - 11:40 CDT, Thursday, September 23, 2021

Keseri PADAYACHY
Research Department, Durban University of Technology, South Africa

*Research Platforms V - Original Unpublished Research*
12:00 - 1:00 CDT, Friday, September 24, 2021

Anna PAPADOPOULOU
Secretary, Eastern Mediterranean & Middle East Chiropractic Federation

*Pediatric Care in Chiropractic: Evaluating the Evidence*
1:00 - 2:00 CDT, Friday, September 24, 2021
Romy PARKER (South Africa)
Professor, Dept, Anaesthesia and Perioperative Medicine, University of Cape Town

Essential Pain Science for Chiropractors
12:00 - 1:00 CDT, Thursday, September 23, 2021

Steven PASSMORE (Canada)
Professor, University of Manitoba, Winnipeg, Canada

Universal Health Coverage: Serving the Underserved
09:40 - 10:00, Thursday, September 23, 2021

David PEEACE (Canada)
Past Chair, Canadian Chiropractors Association

Addressing Diversity, Equity and Inclusion in Chiropractic
10:40 - 11:40 CDT, Thursday, September 23, 2021

Katherine POHLMAN (USA)
Director of Research, Parker University, Dallas, Texas, USA

Pediatric Care in Chiropractic: Evaluating the Evidence
1:00 - 2:00 CDT, Friday, September 24, 2021

Ranen RAMBRIJ (United Arab Emirates)
Private Practice, Dubai, United Arab Emirates

Addressing Diversity, Equity and Inclusion in Chiropractic
10:40 - 11:40 CDT, Thursday, September 23, 2021

Meri ROBINSON NICOL (Switzerland)
Unit Head, Process Efficiency Unit, World Health Organization

The WHO Global Transformation and Key Lessons from COVID-19
08:20 - 08:40, Saturday, September 25, 2021

Sidney RUBINSTEIN (Netherlands)
Associate Professor, Vrije Universiteit, Amsterdam

Research Platforms II - Previously Published Research
12:00 - 1:00 CDT, Thursday, September 23, 2021
Stacie SALSBURY (USA)
Associate Professor, Palmer College of Chiropractic

Research Platforms VIII - Original Unpublished Research
1:00 - 2:00 CDT, Friday, September 24, 2021

Mike SCHNEIDER (USA)
Professor, University of Pittsburgh, Pittsburgh, USA

Research Platforms IV - Original Unpublished Research
1:00 - 2:00 CDT, Thursday, September 23, 2021

Selina SIGAFOOSE JACKSON (USA)
Chair, International Chiropractors Association

Shared Values: Unifying Principles in Chiropractic
10:00 - 11:00 CDT, Friday, September 24, 2021

Yuka SUMI (Switzerland)
Ageing and Health Unit, World Health Organization

Why the Decade of Healthy Ageing is Important For Us All
09:00 - 09:40 CDT, Saturday, September 25, 2021

Cliff TAO (USA)
Chiropractic Radiologist, California, USA

Black, White and Shades of Gray: A Contemporary Approach to Chiropractic Imaging
12:00 - 1:00 CDT, Friday, September 24, 2021

Shawn THISTLE (Canada)
CEO, RRS Education

Knowledge Transfer in Chiropractic: Power, Advancement, Currency
10:20 - 10:40 CDT, Saturday, September 25, 2021

Hayden THOMAS (New Zealand)
President, New Zealand Chiropractors Association

Shared Values: Unifying Principles in Chiropractic
10:00 - 11:00 CDT, Friday, September 24, 2021
Joan VAN ROTTERDAM (Australia)
Chair, Hands on Health Australia

*Chiropractic’s Role in Community Healthcare: the Hands On Health Experience*
09:00 - 09:20 CDT, Thursday, September 23, 2021

Alex VIDAN (USA)
Private Practice, St Louis, Missouri

*Unlocking the Mysteries of the TMJ*
1:00 - 2:00 CDT, Friday, September 24, 2021

Rebekah WILKS (USA)
World Spine Day Committee Member

*Chiropractors as Public Health Advocates*
12:00 - 1:00 CDT, Thursday, September 23, 2021

Leonard WONG (Hong Kong SAR)
Member, Hong Kong Chiropractors Council

*Chiropractic Regulation: Through COVID-19 and Beyond*
12:00 - 1:00 CDT, Friday, September 24, 2021

Yi Kai WONG (Malaysia)
Chiropractic Programme Director, International Medical University

*Chiropractors as Public Health Advocates*
12:00 - 1:00 CDT, Thursday, September 23, 2021

Debbie WRIGHT (Canada)
Board Chair, Canadian Chiropractic Association

*Shared Values: Unifying Principles in Chiropractic*
10:00 - 11:00 CDT, Friday, September 24, 2021

Chris YELVERTON (South Africa)
Chair, Allied Health Professions Council of South Africa

*Chiropractic Regulation: Through COVID-19 and Beyond*
12:00 - 1:00 CDT, Friday, September 24, 2021