From Pain to Brain - A New Direction in Chiropractic

Presented by Richard G. Barwell, D.C.

This presentation will address Eight Questions that are Critical for the Profession.

Three divisions of this presentation

1. The challenges of our past
2. The new direction
3. The benefits for your practice and the profession

Declaration of Intent

From Pain to Brain -

The Intent of Chiropractic as defined by three major Chiropractic Associations

ACA - Chiropractic is a health care profession that focuses on disorders of the musculoskeletal system and the nervous system, and the effects of these disorders on general health.

GCC - "concerned with the framework of the muscles and bones that support the body (the musculoskeletal system)" and with treating health conditions by helping the musculoskeletal system to work properly.

ICA - chiropractic deals with the relationship between the articulations of the skeleton and nervous system and the role of this relationship in the restoration and maintenance of health. Of primary concern to chiropractic are abnormalities of structure or function of the vertebral column known clinically as the vertebral subluxation complex.

Early Chiropractic 1910 - Structural dis-relationship of spinal joints causing nerve impingement at the IVF

"Subluxation is a complex of functional and/or structural and/or pathological articular changes that compromise neural integrity and may influence organ system function and general health."

J Can Chiropr Assoc 2002; 46(4) 215  EF Owens * Director of Research - Sherman College of Straight Chiropractic

Structural Challenges How does a gallon of diet soda knock a bone out of position? How does an emotional stressor create a vertebral misalignment? Is it a subluxation or a fixation?
**Functional Challenges** What “FUNCTION” are we addressing? Skeletal Motion? Postural Changes? Para Spinal Muscle Activity?

**Pathological Articular Challenges** Is Chiropractic about Pathological Joint Dysfunction? Segmental Degeneration? Facet Syndromes? Disc Degeneration?

Subluxation should have an element of articular pathology, but leaves the exact nature of that pathology unspecified. It should be associated with a neurological effect in order to be considered a subluxation. Still, the exact nature of the compromise to neural integrity is unclear. J Can Chiropr Assoc 2002; 46(4) 215 - EF Owens * Director of Research - Sherman College of Straight Chiropractic

**Subluxation** : The Old Theory has Led to Current Position of the Profession- Vertebral Misalignment (*Dyskinesia*) which leads to Nerve Impingement (*Dysautonomia*) which creates Nerve Interference (*Dysponesis*)

**7 levels of Practice Consciousness**


**Critical Question 1. for the Profession - What system is the primary focus of Chiropractic care?**


The nervous system involvement has been moved to the second focus behind spinal movement. Our message has really been - bones and joints are more important than the nervous system.

The majority of DCs think we are neurologically based however, that "thinking" ends at C1. What examples do you use in your office to show the neurological connection? Seriously, how many conversations have you had about Chiropractic that really “talks” about the brain?

**Is Our Intent to:** Correct vertebral subluxation To improve posture Restore joint movement To reduce pain Restore spinal curves Balance leg lengths To improve neurological function

**Is your current exam congruent with your Philosophy?**

**Critical Question 2 for the Profession - Does our Philosophy stand with today’s knowledge?**

**Chiropractic Philosophy** - Innate - removed from Chiropractic education but now incorporated into all other health care professions

**Technique** - Adjustment - no science - no philosophy we were left with technique masters to define the profession

**Science** - Subluxation - today neuroscience is redefining health care and the understanding of subluxation from a Chiropractic position
Let's start with some information about our basic philosophical beliefs

Why do we have a philosophy in the first place? What is the relationship between universal and Innate intelligence as it relates to Chiropractic? Do either of these have any relationship to the nervous system? Is the use of the term Innate intelligence appropriate today?

**Universal Intelligence** - Universal Intelligence is in all matter and continually gives to it all its properties and actions. Matter is in a cycle of constant change. (from order, to disorder, to order) Entropy presents as a continuum (laws of thermodynamics) Cyclical in Nature. This sequential ordering of events explains why evolution is the process. The true meaning of evolution is not evolution of one life form on earth to another but it is the evolution of the expression of intelligence. There is a direct relationship between the organization of energy and intelligence

**Innate Intelligence**  Life contains Innate (inborn) Intelligence and that this force is responsible for the organization, maintenance and healing of the body - Constructive - Adaptive power for survival Expressed through the nervous system

Cellular Innate - Organ Innate - System Innate - Innate expression is affected by the limitation of matter (The physical body) - Under the control of Central Organizing Authority (Neural Integrity)

**Neural Integrity** Optimal Cell to Cell and System to System Communication - Ideal Neuroplasticity (Adapt and Respond)

Ideal Neuroplasticity (Adapt and Respond)

Sensory Input - Alert Response Mechanism - Fight/Flight Response (endocrine, immune and nervous systems) - Recovery

**Points**

1. Our Philosophy differentiates us from the practice of medicine
2. Universal intelligence dynamics create a hostile environment
3. Intelligence is expressed though organization of energy
4. Evolution develops through the expression of intelligence
5. Innate intelligence maintains life in this hostile environment
6. The nervous system coordinates innate expression

**A Moment of Truth for Chiropractic** - A paradigm shift

The three systems of the body
1. The passive system - the bones and joints. As they do nothing on their own, they can’t be the cause!
2. The active system - the muscles - Create action but don’t act on their own, they can’t be the cause!
3. The nervous system - the control system - The central organizing authority - The seat of all dysfunction.
The restriction to the growth and acceptance of Chiropractic is the adherence to the Theory of Vertebral Subluxation as cause. Why? Because no one asked the questions of:


Critical Question 3 for the Profession. - What is the cause of Vertebral subluxation?

Simplified Model of Subluxation (From a conversation with Robert H.I. Blanks, Ph.D., Professor Emeritus - Department of Anatomy and Neurobiology School of Biological Sciences - University of California). In order to experience General Health & Wellbeing our systems must have Neural Integrity - Optimal Cell to Cell Communication - Ideal Neuroplasticity (Unimpaired Ability to Adapt and Respond)

Central Organizing Authority (Neural Integrity)

Cortical Activity - EEG Brain Wave Patterns - Learned experiences build hard-wired neural patterns stored with emotional triggers. Limbic System Responses - Sympathetic /Para-Sympathetic balance - based on input from the cortex

Cortical activity - Delta .5 - 4 Hz Deep Sleep State, Regenerative State Complex problem solving, Consciousness completely internalized -Transcendental states, Dominant wave form in infants up to 6 months old 40% of the amplitude in infants, 5% of the amplitude in a “normal” adult Challenges - Learning Disabilities Brain Injuries Coma, Irregular sleep patterns, hyper responses, Filtering Problems (ADHD)

Theta 4 - 7.8 Hz, Light sleep, deep relaxation, Emotional storage, Subconscious relaxation, Subconscious conceptual development - Challenges - Learning Disabilities, Processing Problems (ADD), Slow Reaction Time Lack of Oxygen and Blood Flow, Depression, Anxiety

Alpha - 7.8Hz low A*/ 9-12Hz high A - Meditative state, healing mode, earth frequency, learning frequency, conscious - Challenges -Daydreamers, focus challenges, Disconnection, Depression, Traumatic Brain Injuries

SMR (Sensory Motor Rhythm) 12 to 15Hz - Posture, Balance and motion regulation. Challenges - Muddled thinking, Poor cognitive understanding, Poor retention, increased stress responses

Beta - 15 to 31Hz, active brain, fight/flight- 40Hz manic, high energy consumption. Challenges - Epileptic Auras, Cortical Irritability, Hyper-vigilance, Over-thinking, Ruminations, OCD, Anxiety Disorders, Sleep Disorders, Bruxism

Limbic disruptions - sympathetic para sympathetic imbalance, poor recovery, Cerebellum 10% by volume - 50 % of neurons, 80% of sensory input is through the eyes, Orient the body in space, Responds to the pull of gravity, Movement proprioception, Calmed by parasympathetic NS,
Coordination of fine tune movements, balance and proprioception, Plays a role in fight/flight,. Important for physical well-being and safety, Meditation (loving kindness) puts cerebellum at peace - Para sympathetic response, REM sleep (Theta) - Turns off Cerebellum guard duty

**Excellent Paper - Brain Economics: - Housekeeping Routines in the Brain**


Brain Economics: - Housekeeping Routines in the Brain

Every task based on sensory input before action

Processing resources (PR) of sensory input critical for speed and accuracy of response. Allocation of PR determines efficiency of neurological function.

Psychological Refractory Period (PRP) - PR interference (neurological efficiency challenges) can be caused by:

1. Resource pool limit reached - Time share override, this creates a structural bottleneck
2. Hierarchy of the task - defers one task due to importance of second task
3. Cognitive demand and ability - status of memory - recall and storage

Elderly persons are not as efficient in dividing their attention as younger individuals; therefore it may be advantageous to devise a training method which could help elderly persons to divide their attention between tasks in a more effective way. While this proposal was not meant to provide a complete picture of resource-dependent processing in the brain, it has served to provide a reasonable coherent and simple explanation, and indeed prediction, of patterns of interference, or lack thereof, between many different task combinations (Sanders, 1997). Foundation for the development of abnormal pattern of neurological responses - i.e. Subluxation

The results showed no differences in accuracy between the two groups nor between the two strategies, which sustain the claim that individual differences in performance can be reduced, or even eliminated, with appropriate training.

The key word here is “appropriate” If we can determine the source of the interference to the PRs and measure the outcome of this interference then we will be able to measure the effectiveness of the care from an appropriate application.

**The BOMB**

Compromised Neural Integrity (CNI) is SUBLUXATION created by emotional, chemical, structural, and other stressors that create overloaded processing resources (PR) of the CNS
Compromised Neural Integrity

- Reduced Neuroplasticity (ability to adapt and respond) - Inappropriate action - Distorted cell-cell communication

“SUBLUXATION” - Maladaptive Behavior - CNS malfunction (message distortion), sets up abnormal neurological pattern, which distorts the active system (muscle action), which effects system activity. (Cellular disruption, organ function, joint relationships) Sub-optimal Health, Diminished Quality of Life, and Disease

Critical Question 4 for the Profession. As the nerve root compression theory is not supported, why does the adjustment create such dramatic results?

4 research studies that are changing the profession

The effect of the Chiropractic adjustment on the brain wave pattern as measured by EEG. Richard Barwell, DC; Annette Long, Ph.D.; Alvah Byers, Ph.D; Craig Schisler, B.A., M.A., DC. International Research and Paper symposium 2004 Awarded the best research paper in review Sherman Chiropractic College

Cervical spine manipulation alters sensorimotor integration: A somatosensory evoked potential study. Heidi Haavik Taylor*, Bernadette Murphy. Human Neurophysiology and Rehabilitation Laboratory, Department of Sport and Exercise Science, Tamaki Campus, University of Auckland, Private Bag 92019, 261 Morrin Road, Glen Innes, Auckland, New Zealand Accepted 11 September 2006 2006 International Federation of Clinical Neurophysiology. Published by Elsevier Ireland Ltd.

Cerebral Metabolic Changes in Men After Chiropractic Spinal Manipulation for Neck pain. Takeshi Ogura, oc, PhD; Manabu Tashiro, MD, phD; Mehedi Masud, MD, phD; Shoichi Watanuki; Katsuhiko Shibuya, us; Keiichiro Yamaguchi, MD, phD; Masatoshi Itoh, MD, phD: Hiroshi Fukuda, MD, phD; Kazuhiko yanai, nro, prro Cortical glucose uptake by Pet scan & visual analog scale - 12 people measured twice


A Four Case Study - The effect of the Chiropractic adjustment on the brain wave pattern as measured by EEG. Significance - open the door to a new view on the role of the Chiropractic adjustment.

Cervical spine manipulation alters sensorimotor integration: A somatosensory evoked potential study. - Significance: This study suggests that cervical spine manipulation may alter cortical somato-sensory processing and sensorimotor integration. These findings may help to elucidate the mechanisms responsible for the effective relief of pain and restoration of functional ability documented following spinal manipulation treatment. 2006 International Federation of Clinical Neurophysiology. Published by Elsevier Ireland Ltd.
Cerebral Metabolic Changes in Men After Chiropractic Spinal Manipulation for Neck pain. – Significance: Increased uptake in (Increased activity) Inferior prefrontal cortex - Go/no go, risk aversion, language production, verb usage, targeting Anterior cingulated cortex - autonomic function, emotion, BP, RR, awareness, pain regulation, Reward anticipation, motivation, rational, cognitive functions Middle temporal gyrus - semantic memory, language, visual perception, and sensory integration, facial recognition - Decreased activity in Cerebellar vermis - motor control, connects brain and spinal cord, eye movement, planning and movement timing, posture.

Changes in H-reflex and V waves following spinal manipulation.


Over-all findings suggest the Chiropractic Adjustment

Improved: Cortical Function, Balance, Autonomic Nervous System Function, Risk Evaluation, Language Skills, Motivation, Thinking, Memory, Brain Output (45% to muscle) Digestion, Quality of Life
Reduced: Stress Level, Inflammation Processes, Muscle Tension, Fatigue, Pain

The Invisible - Made Visible - Today we can see the CNS in action The adjustment creates a neurological pattern interrupt - The neural dynamic state of interactive, resonant, existential communion (reuniting man the physical with man the spiritual)

Critical Question 5 for the Profession. - Does Vertebral Subluxation define Chiropractic?

Is chiropractic dependent on the theory of VS to exist? Does vertebral subluxation define Chiropractic? Has there ever been a question about VS being the causative factor in health?

According to BJ In a speech given in 1930 entitled “The Hour Has Arrived”

He said – “Up until a few months ago it was generally believed that you could locate a subluxation by palpation; with a spinograph (x-ray); by the location of tender nerves, taut fibers, or “contractured” muscles. None of these can locate a subluxation. Any or all of these indicative guides can and will locate misalignments.

He went on to say “The majority of Chiropractors work with the concept that they are the all-important feature of “Adjusting” subluxations... “Adjusting” in their minds, means pushing bones into adjusted positions. I’ve never had such a concept! To me, adjusting a vertebra is what happens when my hands leave the back; it is that reaction that occurs when Innate recoils in the body of the patient, which resets the bone into ‘normal’ position. My work is an enticement to get Innate to make the adjustment.

According to Ralph W. Stephenson, D.C.
Stephenson “Chiropractic Text Book”. “In the Normal Complete Cycle, the cause is in the brain, and
is innate intelligence” He then goes on to say “In the Abnormal Cycle, the cause is the subluxation” (not vertebral! I think we confuse our explanation of what we do with why we do it. We do an adjustment using the nerve rich joints of the spine as our window to restoring balance within the brain where the subluxation began. * page 67 Art 104 on How to tell the chiropractic story

Critical Question 6 for the Profession. - Is there a relationship between stress, the nervous system and Chiropractic?

What is the relationship between Stress and illness or disease?

Current medical research states that 95% of all diseases/illnesses are cause by stress. (Comprehensive Stress Management by Jerrold S. Greenberg, 1990). The other 5% are considered to be genetic in nature. Genetic breakdown is a result of stress at the cellular level which really means that 100 of our health challenges including all diseases and illnesses are stress induced. This represents the current leading edge of medical research. They are just now recognizing the dangerous effect of stress on human life. Our lives are getting more complicated and more stressful. There is less and less time for recovery from stressful situations.

Stressors and Stress- Social, microbes, toxins, impaired nutrition, electromagnetic Influences Immune, Endocrine, Nervous systems plus genetic factor influence.

Stress Pathways:
Hypothalmo-Pituitary-Medulla (HPA) Axis
Sympathetic-Adrenal-Medulla (SNS) Axis
Vagus Nerve (PNS)
In the past 20 years, the field of psychoneuroimmunology has demonstrated major connections between the stress pathways and the immune system. The top 3 boxes show direct connections of the HPA, SNS and PNS with Immune cells in lymph nodes, thymus and elsewhere throughout the body.

Components of Innate Immune response:
Anatomical Barriers (mucous membrane) -Lymphatic system -Phagocytosis -Inflammation (Mast cells)
Natural Killer Cells: Neutrophils, Monocytes
Molecules: Complement proteins, Acute phase proteins, Cytokines (produced by T-helper cells and include Lymphokines, Monokines, and Interferons) - A shift of cytokines to the right occurs in a time of stress Interleukins affects the balance between TH1 and TH2 is critical
Th1 Immune stem cell - controls cellular immune response reduction leads to damaged cell production
Th2 Immune stem cell - control overall immune sensitivity - increase leads to multiple sensitivities to environmental factors

CNS injury-induced immune deficiency syndrome (CNS-IDS) – HPA Axis, SNS and PNS effect on immune system function and Th1/Th2 balance as relates to cancer and immune sensitivity. Meisel et al., Nature Rev. Neurosci. 6:775-786, 2005 I

CNS injury can be malfunction (neurological subluxation) over years - same result
**Signs of Stress in Baby** - Disturbed Detachment - Cycle Baby has needs - Baby cries - needs not met by caregiver - Trust does not develop - Rage develops instead - baby has needs

**Signs of Stress in Children** - Infant - Reflux sleep disturbances, feeding problems - Toddler-Inconsolable, avoiding/alone, biting, lethargic - School-age-Short-term behavior changes, fighting, withdrawn, poor social


**Critical Question 7 for the Profession.** - How can we prove the adjustment directly alters CNS function?

**Bio Chart Report** (patient identifies health challenge is neurological in nature)
- Over aroused - Hyperactive systems
- Under aroused - Hypoactive systems
- Instable - fluctuates between over and under aroused
- Exhausted - beyond over aroused to burned out - autoimmune system disruption

**The BioChart (The Neurological Shift)** - The DC would then ask if they have found where they are on the Circle Chart and if so then respond with - “So you see that the challenges you are having with your health are due to your nervous system not functioning in this balanced area. The signs and symptoms are just a manifestation of the imbalance. What do you think is the best way to deal with this - just worry about the symptoms or work on getting your nervous system functioning properly?”

When they finish with, “work on my nervous system”

Ask, “Can you find your spouse? How about your children? What do you think we should do about their health challenges? I suggest that you make an appointment to have them checked and decide what you want to do from there.”

**Neurophysiological Activity Measurements**

- **Cortical activity** - EEG* - Synaptic brain patterns (*Electroencephalographic) (99% reproducibility)
- **Limbic responses** - Heart rate - 56 to 66 BPM Ideal range - Respiration - 6 to 12 BPM HRV - Very Low, Low, High frequency, Sweat glands - .80 to 1.50µS - Thermal - 93.92 to 96.98 F - SEMG - .5 to 2.5µV - Blood Pressure - Bilateral weight scales - Posture

**NeuroInfiniti - Stress Response Evaluation (SRE) test** - A 15 minute dynamic computerized test designed for 21st Century Neurologically Based Chiropractic Offices. *The NeuroInfiniti allows us to examine how the body and Nervous System are responding to the environment (true health status), so if you can measure that, you can measure health status at any point in time. X-rays can't tell you that and neither can a thermal scan.*
Only by determining how the brain perceives and responds to stimuli, can you
determine the integrity of the nervous system.” Dr. Matt Lapp

I have a Sub Station/MyoVision, isn’t it the same? No - far from it!
The NeuroInfinti measures: EEG (cortical brain waves) and 6 different limbic system responses (heart
rate, skin conductance, extremity temperatures, heart rate variability, sEMG, and respiration rates)
during a single 15 min. computer driven dynamic test program, including three different types of
stressors and recovery. It is a dynamic, not static, method of testing. Plus it also offers bio and
neurofeedback training programs.

Care Guidelines (Frequency, Duration and Intensity - (FDI)
Frequency - recurrences of care times (mins/ hours /days /weeks /months)
Duration - length of care (will vary depending on frequency and state of the nervous system)
Intensity - type of technique, amount of areas involved, and frequency of care.

“Law of Hormesis” Intensity involves the application of the “Law of Hormesis"
Strong stimulation stops physiological response) - the higher the force, the higher the stimulation. -
Manual adjusting, Multiple areas, Upper Cervical work involves high stimulation (very high
stimulation) - TMJ - Thompson T Point, KST - influences Frequency of care
Moderate stimulation inhibits physiological responses - Instrument adjusting (TRT - activator -
AOT, SOT, KST)
Light stimulation encourages physiological responses- Light touch, Network*, Best*, Access, KST

How the Chiropractic Adjustment Builds New Neural Pathways
First look at how synapses form new memories - Spine like projections sprouted from axons( some
withered in less than a day - some lasted for months) If the Synapse is a useful one, it will stay
(relates to long term memories) if not, it will retract - Constantly exploring alternative arrangements
which probably has something to do with learning - Discover Magazine April 2003. Individual neural
cells somehow know which memories to preserve in the form of lasting connections to other nerve
cells and which to let fade.

Information destined for declarative memory such as : people, places, events must pass through the
Hippocampus* before being recorded in the cerebral cortex.* *Refers to long term memory.

Neurogenesis occurs throughout life, not only in the hippocampus but in the brain’s olfactory

Building Short Term Memories - Stimulation of a synapse to temporarily “strengthen” or sensitize
it to subsequent signals

Short Term Memories (STM) - Moment to moment memories are necessary for operating in the
present and are driven by the strength of the individual synapse (Impulse strength)

Long Term Memories (LTM) - Based on an important event or repetition by firing a neural
message that says: important message - record this! This turns on the gene which creates the new
pathway and lasting memory.
Cell fires by Ca ion channels opening and sending bursts (spurts) of Ca into the neuron, creating a neural code. (Frequency) - Internal impulse. Alterations at the synaptic junction to repeated stimulations - creates a release of Synapse Strengthening Proteins.

**Critical Question 8 for the Profession - Is there a role of neurological measuring instruments in Chiropractic?**

B.J. Palmer Developer of the profession built the Electroencephaloneuromentimpograph looking for the vital link between the adjustment and Innate.

**The Incongruences Killing the Profession**
The Subluxation theory remains unsupported!
The role of philosophy has not been realized!
Defense of the theory of subluxation has limited our vision!
We lacked evidence of the reason the adjustment gets great results!
Examination use by DCs has little to do with the intent of care!
Our message is inconsistent

**Perspective Shifts**
**General Understanding** - Chiropractic is neurologically based
**Challenge** - The nervous system ends at C1

**General Understanding** - Chiropractic gets great results
**Challenge** - Vertebral subluxation theory is not supported

**General Understanding** - All techniques get results
**Challenge** - Not consistently

**General Understanding** - Non manual techniques adjusting are Chiropractic techniques
**Challenge** - Outside of the VS theory

**Filling the Gap**

**New Knowledge**
The adjustment directly alters CNS function
Inexpensive CNS examination instrumentation is now available for Chiropractic offices.
Returns the profession to cause based care

**Outcomes**
Chiropractic is CNS therapy
Your exam is now congruent with your philosophy
Increased PVA, higher value care, Increased Income, more satisfaction

**Neurologically Based Chiropractic Definitions**
**Chiropractic** is: The Art, Science and Philosophy of locating and facilitating the reduction of interference to the Neuro-based Allostatic responses of the body.
An Adjustment is: A Chiropractic procedure whereby the consequence of an action serves to continually modify further action within the nervous system with the intent of creating harmony within the body’s systems.

Subluxation is: CNI Subluxation is a neurological imbalance or distortion in the body associated with adverse physiological responses and/or structural changes, which may become persistent and progressive. The most frequent site for the chiropractic correction of subluxation is via the vertebral column. CCP Guidelines 2013

Neurologically Based Chiropractic (NBC) The philosophical approach (basic belief) in which the Central Nervous System is the primary focus of Chiropractic care and all spinal mechanics, joint play, vertebral fixations, VS or VSC responses are secondary or tertiary in nature.

What does NBC do for the Profession?

Subluxation vs. vertebral subluxation - If not hard bone on soft nerve, what is it? Philosophy, Science and Art - Certification vs non certification of instruments Recognized standards of measurements (where vs fails) - broadens the Scope of Practice. Career satisfaction - Passion vs Job

How will the NI help me?

Care Plans
- Justification beyond symptom relief
- higher compliance
Confidence
- If you had done nothing would they have gotten better anyway?
- Belief in who you are
- Objective proof in what you are doing
Value of Chiropractic
- back doctor vs. functional neurologist

Benefits - Show the power of your care to improve nervous system function and by releasing the power of Innate. Neurologically Based Chiropractic - Increase your confidence - Increase your compliance, Adds an income center, Broaden the scope of Chiropractic, Increase your PVA, Increase your Income, Experience the power of Chiropractic, Advances the Profession

Buying Equipment Here is the challenge! If you are going to base care on a patient’s neurophysiology, there are six critical measurement issues at this point. 1. Use of standardized measurements 2. Use of approved instrumentation 3. Ability to compare responses to ideals 4. A dynamic method of measurement 5. Pre and post care comparisons 6. Accuracy and reproducibility The instrument should have FDA, CE, ISO and Health Canada Certified

The Neuroscience of Chiropractic
"Neuroscience of the last 15 years now supports the basic tenet of Chiropractic - it is the nervous system that controls the destiny of a person’s health. The search for the evidence of what we have claimed for over 100 years is finished. The only question that remains is whether the Chiropractic
profession is willing to stand up and be counted. We are no longer limited to back pain relief or by the constraints of insurance coverage.” – Dr. Richard Barwell