



Chiropractic BioPhysics
CBP—The Science of Spinal Health

September 21 – 27, 2024

Basic Certification Series: Modules 1 – 6

Module 1. CBP® Basic or X-ray & Posture Seminar

Course Title: Basics of CBP Technique

Instructors: Dr. Deed Harrison, Dr. Joe Ferrantelli, Dr. Jason Haas, Dr. Joe Betz

Course Objective: This course provides an integrated education for the Doctor of Chiropractic reviewing the literature on frequency and duration topics for establishing a logical treatment plan for Chiropractic patients. This course will define two types of structural based models for chiropractic assessment, interventions and outcomes. The first is a set of average and ideal alignment values for the upright spinal column and the second is an optimum static equilibrium upright postural model; detailed literature will be presented. Using the models as a starting position, six biomechanical types of subluxation will be delineated. Emphasis will be placed on abnormal posture and segmental spinal coupling patterns as rotations and translations in 3-D as well as alterations of the sagittal plane curvatures. The validity, reliability, projection geometry of CBP analysis methods will be presented. The CBP® method of postural examination and with practical technique training stations will be taught. Some basic definitions and theorems from mechanical engineering governing rigid body motion will be reviewed and applied to the spine and posture. The attendee will learn to identify, categorize, quantify, and correct the structural component of the vertebral subluxation complex. Lastly, the attendee will learn to structure a patient specific, evidence based CBP Rehabilitative Program of care terms of frequency and duration of care.

1) Overview of CBP Technique, CBP Mirror Image Procedures

- Rationale for Care, Acute versus Chronic Care
- Define Chiropractic & Subluxation, 3-D Postural Analysis
- Postural displacements and vertebral kinematics
- Mechanical engineering principles: 3-D listing system for spine and posture displacements.

2) CBP Technique Care Plans: Rehabilitative vs. Supportive and Maintenance Care:

- Initial Report of findings and Structuring a CBP Rehabilitative Program of care for patients based on examination findings: What does the literature say in terms of frequency and duration of care?
- Re-Report of findings, Explanation of patient outcome measures, and Structuring a 2nd CBP Rehabilitative Program of care: What does the literature say regarding frequency and duration of care?
- Maintenance vs. Supportive care plans for patients: What does the literature say?

3) Introduction to A system Analysis of 2-D CBP Procedures & Views, Equipment Alignment

4) A System of 2-D Analysis:

- Modified Riser-Ferguson
- Posterior Tangents
- CBP peer-reviewed published reliability studies.

5) Practical Technique Station Demonstrations

- Postural analysis as rotations and translations
- Mirror image drop table adjusting for postural displacements
- Mirror image instrument adjusting for postural displacements
- Mirror image exercise for strength, flexibility, posture correction.

6) Health Disorders that May Positively Respond to Chiropractic Intervention and Management of Sagittal Plane Deformities:

- ICA Best Practices—Research evidence indicates that over 330 health conditions have been reported to respond to Chiropractic.
- Indications and contraindications for the use of home orthotics: Denneroll, Compression extension traction wedge, and others.

7) Harrison Spinal Model as Goal of Care

- Cervical Spine—Spine 1996 and 2004,
- Thoracic Spine—J Spinal Disorders 2002 and Spine 2003
- Lumbar Spine---J Spinal Disorders 1997 and J Orthopedic Res 1998.

8) 2-D Projection Physics & Image Distortion

- 2-D Projection Physics of 3-D Human Posture (JMPT 1998, Chiropractic Technique 1996)

Module 2. CBP® Drop Table Adjusting Seminar

Course Title: Drop Table Adjusting, Leg Length Inequality & Orthotic Intervention

Instructors: Dr. Deed Harrison, Dr. Joe Ferrantelli, Dr. Jason Haas, Dr. Stu Currie

Course Objective: This course provides an integrated education for the Doctor of Chiropractic in the science and art of spine, posture, and lower extremity disorders. The total permutations of abnormal posture using formulas from probability theory will be delineated and a literature review on postural displacements as they correlate to patient conditions will be provided. The details of objective postural assessment and measurement will be reviewed. The Chiropractor will learn corrective global postural subluxation set-ups for the head, thoracic cage, & pelvis on a drop table. To provide diagnosis, analysis and course of care for short leg syndrome and lower extremity disorders. A survey of research material will be reviewed supporting the utilization and efficacy of Chiropractic Biophysics drop table technique treatment methods across a population of patients with chronic pain conditions.

1) Health Disorders that May Positively Respond to Chiropractic Intervention and Management of Sagittal Plane Deformities Using Spinal Orthotics:

- Research evidence indicates that a variety of health conditions have been reported to respond to Chiropractic.
- Indications and contraindications for the use of home corrective orthotics to rehabilitate the sagittal plane curves: Cervical spine, lumbar spine, thoracic spine

2) CBP Technique Training Stations

- In office Posture Analysis with Computerized Methodology
- Comprehensive visual analysis of posture displacements.
- Cervical, thoracic, and lumbo-pelvic corrective orthotic training—Denneroll Spine orthotic implementation with indications and contra-indications:
 - a) Sagittal cervical setups and case management
 - b) Sagittal thoracic setups and case management
 - c) Sagittal lumbar setups and case management

3) Biomechanics Principles of Postural Rotations and Translations in CBP technique set ups:

- **Structural Displacements**
 - Segmental displacement
 - Posture and spinal displacement patterns
- **Permutations of Postural Displacements**
 - Single postures of the head, thorax, and pelvis
 - Double, triple, quadruple, ..., sextuple combination postures of head, thorax, and pelvis equating to 728 unique postural combinations of each region

4) Categories of Biomechanical Principles and the Subluxation that will be reviewed and utilized to determine postural rotation and translations in technique set ups:

- **Functional**
 - Hypo/Hyper mobility of spinal segments
 - Fixed segments
 - Aberrant motion or altered coupling
 - Coronal and Sagittal plane Hyper tonic muscles (spasm)
 - Coronal and Sagittal plane Asymmetrical muscle activity
- **Review Postural Displacements Correlated to Health Disorders**
 - The prevalence of lateral head shift postures in a patient population: A correlation of posture magnitude, pain, and demographic variables.

5) Objective Measurements of Postural Displacements

- Types of postural measurement devices
- Reliability and validity of postural measurement devices
- PostureScreen computerized photographic measurement of 3-D postural displacements: Reliability and validity studies
- Clinical implementation of the Posture Analysis systems and understanding the reported measurements: Posture Index scale.

6) Comprehensive CBP Drop Table set-ups with Biomechanical Principles.

- How to utilize Postural rotations and translations in drop table set-ups
- Single, double, and triple combination global postural subluxation set-ups for the head, thoracic cage, and pelvis on a drop table
- AP Full Spine Drop Table Mirror-Image Adjusting
- Lateral Full Spine Drop Table Mirror-Image Adjusting

7) Comprehensive CBP Drop Table set-ups with Biomechanical Principles.

- Double, and triple combination global postural subluxation set-ups for the head, thoracic cage, and pelvis on a drop table
- AP Full Spine Drop Table Mirror-Image Adjusting
- Lateral Full Spine Drop Table Mirror-Image Adjusting.

8) Practical Station Demonstrations

- Drop Table Mirror Image Adjustments:
 - d) AP Cervical Drop Table Mirror-Image Adjusting
 - e) AP Thoracic Drop Table Mirror-Image Adjusting
 - f) AP Pelvic Drop Table Mirror-Image Adjusting
 - g) Sagittal Drop Table Mirror-Image Adjusting.

9) Research and Evidence for Chiropractic Structural Based Programs of Care

- Review randomized trials for cervical lordosis rehabilitation
- Review randomized trials for lumbar lordosis rehabilitation
- Review CBP corrective care protocol of care with Frequency and Duration

10) Anatomical vs. Functional Leg Length Inequality & Foot Disorders

- Understanding the functional vs. functional short leg
- Incidence and prevalence of leg length disorders
- Reliability and validity of leg length assessments
- Sacral obliquity and anomalies mimicking leg length discrepancies
- Health consequences of leg length discrepancies
- Interventional orthotics for leg length discrepancies and pelvic asymmetry

11) Review course material, summarize.

- Question and Answer and case study presentations.
- Review drop table posture setups.

Module 3. CBP® Instrument Adjusting & Upper Cervical Seminar

Course Title: Mirror Image Instrument Adjusting & Upper Cervical Analysis

Instructors: Dr. Deed Harrison, Dr. Joe Ferrantelli

Course Objective: This course provides an integrated education for the Doctor of Chiropractic in the science and art of upper cervical spinal disorders with application to instrument adjusting for full spine postural subluxations and joint fixations. The Chiropractor will learn how posture displacement influences the upper cervical spine as well as normal joint kinematics and instability analysis of the upper cervical spine. The biomechanics and neurophysiological mechanisms of instrument adjusting techniques will be reviewed with indications for different techniques of segmental versus postural adjusting. Corrective global postural subluxation set-ups for the head, thoracic cage, and pelvis with a hand-held instrument used to adjust the upper cervical area will be reviewed as will segmental adjusting techniques for upper cervical subluxation/displacements. The DC will learn at least one proper side and opposite side type of set up for each of the head to thoracic spine postures and the DC will learn one proper side and opposite side type of set up for each of the very common full spine postures. Upper cervical flexion/extension subluxation/fixations of the occiput on atlas and their corrective adjustments will be described and demonstrated. The details of case management using these instrument adjusting methods will be covered using a variety of case studies for a comprehensive picture of clinical application of this course material. Last, a survey of research material will be reviewed supporting the utilization and efficacy of the course materials in patient populations

1) Upper Cervical Positioning & Analysis Studies

- Introduction to postural and spinal analysis using a cartesian coordinate system, relative & absolute rotation angles, degrees of freedom, basic theorems
- Introduction to upper cervical analysis, reliability studies, assessments
- Clinical outcome studies of upper cervical Chiropractic adjustments.

2) Head Posture and Upper Cervical Spine Kinematics

- Analyzing the upper cervical spine in lateral head translations
- Analyzing the upper cervical spine in axial (y-axis) head rotations
- Analyzing the upper cervical spine in lateral flexions of the head.

3) Mirror Image Instrument Adjusting Setups & Upper Cervical Specific

- Head to thoracic single, double, and triple combination postural/spine adjustments
- Thorax to pelvis single, double, and triple combination postural/spine adjustments
- Pelvis to feet single, double, and triple combination postural/spine adjustments
- Full spine postural/spine adjustments

4) Practical Stations

- Hand-held cervical instrument for AP viewed postures (standing)
- Hand-held cervical instrument for AP viewed postures (side posture)
- Hand-held cervical Instrument for Lateral viewed postures
- Upper Cervical specific adjustments on the drop table.

5) Health Disorders that May Positively Respond to Chiropractic Intervention and Management of Sagittal Plane Deformities:

- ICA Best Practices—Research evidence indicates that over 330 health conditions have been reported to respond to Chiropractic.
- Chiropractic and Scoliosis Reduction: A Review of the Literature
- Indications and contraindications for the use of home corrective orthotics.

6) Upper Cervical Kinematics and Instability

- Anatomy and Biomechanics of the upper cervical spine
- Flexion/extension kinematics of the upper cervical spine
- Lateral bending and axial rotation kinematics of the upper cervical spine
- Instability cutoff values of upper cervical spine movements.

7) Drop Table Adjustments for Upper Cervical Subluxations/Fixations

- Flexion subluxation/fixation of the occiput on atlas
- Extension subluxation/fixation of the occiput on atlas
- Flexion fixation/subluxation of the atlas on C2
- Extension fixation/subluxation of the atlas on C2
- Pseudo-subluxation of C2 to C3.

Module 4. CBP® Cervical Rehab

Course Title: CBP Structural Rehabilitation of the Cervical Spine

Instructors: Dr. Deed Harrison, Dr. Joe Ferrantelli, Dr. Donald Meyer, Dr. Jason Jaeger

Course Objective: This course provides an integrated education for the Doctor of Chiropractic in the science and art of cervical spine disorders. Detailed literature reviews covering the crisis of cervical disorders in patient populations, the role of spinal manipulative therapy and structural correction of sagittal cervical lordosis will be covered. Normal average and ideal values for the cervical lordosis will be reviewed. Detailed categories of head to thorax postures, spine kinematics and abnormalities of the sagittal cervical lordosis will be learned. The Chiropractor will learn appropriate application and timing of postural and functional exercises for the cervical spine designed to correct spinal subluxation and strengthen the cervical and upper

thoracic spine tissues. The Chiropractor will be introduced to 16 categories of sagittal cervical traction and 3 methods of coronal cervical traction with demonstrations for structural rehabilitation of the cervical spine. Indications and contraindications to these new structural rehabilitation procedures will be reviewed. The details of case management using these structural rehabilitation methods will be covered using a variety of case studies for a comprehensive picture of clinical application of this course material. A survey of research material will be reviewed supporting the utilization and efficacy of CBP technique structural rehabilitation treatment methods across a population of patients.

1) Structural Rehabilitation of the Cervical Spine & Relationship to Chiropractic

- The difference and similarities between functional and structural cervical spine rehabilitation procedures
- Basic biomechanics of cervical spine postural displacements: disc and muscular loads leading to acceleration of cervical degeneration and disorders
- Review of the Literature Defining the Cervical Lordosis in Health & Disease
 - A. Ideal and Average values in adults and children
 - B. Cervical lordosis & neck pain & headache syndromes
 - C. Cervical lordosis and motor vehicle crash collisions
 - D. Cervical lordosis & degeneration of the disc and vertebra

2) Understanding the Posture Spine Connection & Abnormal Cervical Configurations

- Cervical spinal kinematics and coupling for cervical-thoracic posture displacements
- Double and triple postural combinations and their associated spinal kinematic appearance
- Differentiating 'simple' postural displacement patterns of the spine versus complicated, injury related spine displacement types and subluxations.

3) Body Weighting and Dynamic Head/Neck Braces for Cervical Rehabilitation

- History of and clinical indications for use of body weighting for reducing postural/spinal subluxations of the cervical-thoracic region
- Clinical indications for dynamic postural/spine rehabilitation using head/neck remodeling braces
- Case presentations of patients with cervical spine disorders describing the details of patient management using body weighting and dynamic braces.

4) Mirror Image Exercises of the Cervical-Thoracic Region

- Mirror image exercise implementation and application into a chiropractic practice: equipment needs, timing, and appropriate supervision of patient populations
- Mirror image exercise for head and cervical postural displacements
- Mirror image exercise for strength and conditioning in cervical postural displacements.

5) Practical Demonstration Set-Ups

- Pope 2-Way cervical 3-point bending traction method
- DeGeorge Compression extension cervical spine traction method
- Compression extension 2-way cervical spine traction method
- Coronal & Sagittal plane head translation traction methods
- Mirror-Image Exercises for cervical spine/postural subluxations
- Body weighting and dynamic braces for cervical spine/postural subluxations
- Drop Table and Instrument Mirror-Image Adjusting.

6) The Model of the Future is Here: Corrective Chiropractic Health & Wellness

- Examination of clinical practices inhibiting successful implementation of Structural and Functional rehabilitative procedures.
- Quantitative and qualitative reporting along with examples of evidence based reports on postural deviation, spine deviation, nutritional implementation, and physical exercise-therapy modalities.
- Learning to balance structural based Chiropractic with the physical needs of specific patient populations in order to foster long-term patient centered care.

- The DC-PT relationship in a real world postural corrective care rehabilitation care plans.

7) Mirror Image Cervical Spine Traction Procedures and Protocols

- How to Progress the Patient into Cervical Spine Traction Procedures
- 4 Types of Lateral Cervical Traction Methods with 16 categories of sagittal subluxations
 1. Pope 2-way cervical traction: Indications & Contraindications
 2. DeGeorge compression extension traction: Indications & Contraindications
 3. Compression extension 2-way traction: Indications & Contraindications
 4. Meyer's cervical remodeling collar: Indications & Contraindications
- Home traction for the cervical spine: Indications & contraindications
- Postural Traction for Coronal Plane Displacements of the cervical spine
- Traction Procedures for disc herniations and canal stenosis of the cervical spine

8) Case Management & Studies Documenting Correction of the Cervical Spine

- 4 CBP Randomized clinical control trials.
- Non randomized clinical control on CBP Pope 2-way cervical traction procedures for rehabilitation of cervical lordosis in chronic neck pain: APMR 2002
- Non randomized clinical control on CBP compression extension 2-way cervical traction procedures for rehabilitation of cervical lordosis in chronic neck pain: JMPT 2003
- Non randomized clinical control on CBP DeGeorge compression extension cervical traction procedures for rehabilitation of cervical lordosis in chronic neck pain: JMPT 2004
- CBP cervical traction in several case reports published in the peer-reviewed literature.
- CBP equipment and patient needs.

Module 5. CBP® Lumbar Rehab

Course Title: CBP Structural Rehabilitation of the Lumbar Spine

Instructors: Dr. Deed Harrison, Dr. Joe Ferrantelli, Dr. Donald Meyer, Dr. Jason Jaeger, Dr. Joe Betz

Course Objective: This course provides an integrated education for the Doctor of Chiropractic in the science and art of lumbo-pelvic disorders. Detailed literature reviews covering the crisis of lumbar disorders in patient populations, the role of spinal manipulative therapy and structural correction of sagittal lumbar lordosis will be covered. Normal average and ideal values for the lumbar lordosis will be reviewed as well the relationship of lumbar curvatures to patient health and disease conditions. Detailed categories of lumbo-pelvic postures, spine kinematics and abnormalities of the sagittal lumbar lordosis will be learned. The Chiropractor will learn appropriate application and timing of postural and functional exercises for the lumbar spine designed to correct spinal subluxation and strengthen the lower back tissues. The Chiropractor will be introduced to 17 categories of sagittal lumbar traction and 5 methods of coronal lumbar traction with demonstrations for structural rehabilitation of the lumbar spine. Indications and contraindications to these new structural rehabilitation procedures will be reviewed. The details of case management using these structural rehabilitation methods will be covered using a variety of case studies for a comprehensive picture of clinical application of this course material. A survey of research material will be reviewed supporting the utilization and efficacy of CBP technique structural rehabilitation treatment methods across a population of patients with chronic pain conditions.

1) Rehabilitation of the Lumbar Lordosis with practical in office and at home methods

- Review of Pelvic morphology and implications and application to the lumbar lordosis
- Exercises for enhancing or reducing the lumbar lordosis
- Home orthotics to restore or rehabilitate the lumbar lordosis
- Mirror image traction and adjusting workshops.

2) Structural Rehabilitation of the Lumbar Spine & relationship to chiropractic

- The low back pain crisis: incidence, prevalence, adolescent and adult low back pain
- Systematic review of spinal manipulative therapy for lumbar disorders: evidence on pain improvements and frequency and duration of Chiropractic intervention
- Basic biomechanics of lumbar spine postural displacements: disc and muscular loads leading to acceleration of lumbar degeneration and lumbar disorders
- Review of the Literature Defining the Lumbar Lordosis in Health & Disease
 - E. Ideal and Average values in Adults and Children
 - F. Lumbar Lordosis & Race or Ethnicity
 - G. Lumbar Lordosis & Low Back Pain Syndromes
 - H. Lumbar Lordosis & Spondylolisthesis
 - I. Lumbar Lordosis & Degeneration of the Disc and Vertebra

3) Understanding the Posture Spine Connection & Abnormal Lumbar Configurations

- Lumbar spinal kinematics and coupling for thoraco-lumbar posture displacements
- Double and triple postural combinations and their associated spinal kinematic appearance
- Differentiating 'simple' postural displacement patterns of the spine versus complicated, injury related spine displacement types and subluxations.

4) Body Weighting and Dynamic Thoraco-Lumbar Braces for Lumbar Rehabilitation

- History of and clinical indications for use of body weighting for reducing postural/spinal subluxations of the thoraco-lumbo-pelvic region
- Clinical indications for dynamic postural/spine rehabilitation using thoraco-lumbar remodeling braces
- Case presentations of patients with lumbar spine disorders describing the details of patient management using body weighting and dynamic braces.

5) Mirror Image Exercises of the Thoraco-lumbar-pelvic Region

- Mirror image exercise implementation and application into a chiropractic practice: equipment needs, timing, and appropriate supervision of patient populations
- Mirror image exercise for thoracic postural displacements
- Mirror image exercise for pelvic postural displacements and full spine exercises.

6) Intro to Mirror Image Traction Procedures and Protocols

- How to Progress the Patient into Lumbar Spine Traction Procedures
- 4 Types of Lateral Lumbar Traction Methods with 17 categories of sagittal subluxations
 - 1. Supine 3-Point Bending Lumbar Traction: Indications & Contraindications
 - 2. Standing 3-Point Bending Lumbar Traction: Indications & Contraindications
 - 3. Sagittal Translation Traction: Indications & Contraindications
 - 4. Hip Extension Traction: Indications & Contraindications.
- Postural Traction for Coronal Plane Displacements of the Lumbar Spine
- Traction Procedures for Disc Herniations and Canal Stenosis of the Lumbar Spine

7) Practical Demonstration Set-Ups

- Standing 3-point bending Lumbar Traction Method
- Supine 3-point bending Lumbar Traction Method
- Coronal & Sagittal plane trunk translation traction methods
- Mirror-Image Exercises
- Body weighting and dynamic braces
- Assessing the patient for orthotic intervention: Demonstrate and give the rationale for correct gait-referenced casting technique.

8) Health Disorders that May Positively Respond to Chiropractic Intervention and Management of Sagittal Plane Deformities

- ICA Best Practices—Research evidence indicates that over 330 health conditions have been reported to respond to Chiropractic.
- Indications and contraindications for the use of home orthotics to improve the sagittal lumbo-pelvic alignment: Lumbar Denneroll, Thoracic Translation Blocks.

9) Case Management & Studies Documenting Correction of the Lumbar Spine

- Non randomized clinical control on CBP lumbar traction procedures for rehabilitation of lumbar lordosis in chronic low back pain: APMR 2002
- CBP lumbar traction in a case series of 3 patients with the flat back syndrome (lumbar kyphosis) and consequent disability: J Chiro Ed 05
- CBP lumbar traction in a case of chronic low back pain with radiculopathy due to disc herniations: JMPT 2004
- CBP equipment and patient needs.

Module 6. CBP® Thoracic Rehab & Case Management

Course Title: Structural Rehabilitation of the Thoracic Spine & CBP Case Management

Instructors: Dr. Deed Harrison, Dr. Joe Betz, Dr. Joe Ferrantelli, Dr. Don Meyer, Dr. Jason Jaeger

Course Objective: This course provides an integrated education for the Doctor of Chiropractic in the Art and Science of chiropractic with an emphasis on postural and spinal distortions of the thoracic spine. Normal values for the sagittal plane of the thoracic kyphosis will be detailed from the literature and age related changes of the thoracic spine are reviewed. The relationship of the thoracic spine to the lumbar and cervical regions will be discussed. A major emphasis is placed on understanding the role of thoracic spine disorders and subluxations to patient health and disease conditions. Examination and documentation procedures will be reviewed mainly for thoracic vertebral subluxation complexes but lumbar and cervical subluxation complexes will be reviewed too. Chiropractic adjustive and rehabilitative treatment techniques for thoracic, lumbar, and cervical subluxations will be detailed. A survey of research material will be reviewed supporting the utilization and efficacy of Chiropractic Biophysics technique treatment methods across a spectrum of patient conditions.

1) Thoracic Spine Biomechanics, Subluxation Patterns, & Health Disorders

- Review of thoracic kyphosis normative data for pediatrics, adults, and geriatrics
- Review of the Harrison sagittal plane spinal thoracic model
- Biomechanics of thoracic posture displacements
- Altered thoracic kyphosis and postural displacements and health consequences
- Home Care and in office rehabilitation methods for improving the thoracic kyphosis
- CBP Mirror Image Training workshop.

2) Thoracic Spine Biomechanics, Subluxation Patterns, & Health Disorders

- Review of thoracic kyphosis normative data for pediatrics, adults, and geriatrics
- Review of the Harrison sagittal plane spinal thoracic model
- Biomechanics of thoracic posture displacements
- Altered thoracic kyphosis and postural displacements and health consequences

3) Detailed Overview of CBP Examination Procedures

- Structural based outcome measures: PosturePrint® Posture analysis and spine alignment
- Functional based outcome measures: Range of motion, Algometry, Seng, etc
- When and which outcome questionnaires: Numerical rating scale, Oswestry low back pain, Neck disability index, SF-36, SF-12, SF-10
- 6-12 Visit Interim-examination: What outcome assessments to include and why?
- 24-36 Visit Re-evaluation: What outcome assessments to include and why?
- Long-term Follow-up Examination procedures: When should these be performed, what outcome assessments to include and why?

4) Thoracic Spine and Posture Subluxations: Thoracic Kyphosis Types

- Thoracic Kyphosis and its relationship to lumbar & cervical curve correction
- Thoracic straight spine syndrome due to congenital narrowing of the chest diameter.

5) Thoracic Spine and Posture Subluxations and CBP Structural Rehabilitation Techniques with Case Study Examples

- Case Study: Thoracic Hypo-Kyphosis types, analysis and CBP treatment
- Case Study: Postural Hyper-Kyphosis analysis and CBP treatment
- Case Study: Scheueremanns Kyphosis analysis and CBP treatment

6) CBP Mirror Image Methods for Rehabilitation of the Thoracic spine--Workshop

- Mirror image adjusting for the thoracic spine
- Mirror image exercises for the thoracic spine
- Mirror image standing and supine traction for the thoracic spine
- Mirror image home orthotics for the thoracic spine.

7) Dynamic Methods of Postural and Structural Spinal/Pelvic Correction

- The Benefits of Short Duration Whole Body Vibration at resonant frequency with low amplitude
- Case Study Presentation: Rehabilitation of thoracic postural translation in an elderly female with chronic back and pelvic pain using WBV at resonant frequencies with low amplitude
- Case Study Presentation: Rehabilitation of an adult with chronic impairments and abnormal forward head posture resulting from a rear-end motor vehicle collision
- Case Study Presentation: Rehabilitation of a young adult male athlete with anterior thoracic posture and chronic low back pain.

8) Management of Complex Spine and Posture Deformities Using CBP Technique

- Full Spine Posture and Spine Subluxations: Where to start CBP treatment and why?
- Case Study: Thoracic Scoliosis and CBP Treatment.
- Case Study: Lumbar Scoliosis and CBP Treatment.
- Indications and contraindications for the use of home orthotics: Denneroll, Compression extension traction wedge.