

**Course Title:** CBP Advanced Certification Program  
**Instructors:** Dr. Deed Harrison, Dr. Evan Katz, Dr. Joe Betz, Dr. Joe Ferrantelli, Dr. Jason Jaeger, Dr. Dan Murphy, Dr. Jeb McAviney, Dr. Jessica Dachowski, Dr. Paul Oakley  
**Course Objective:** The Chiropractor will learn adjusting technique for the normal and abnormal evolution of the pediatric sagittal plane spinal curvatures and subluxation conditions; Advanced introduction/review of adjustive technique correction for spinal, posture, and lower extremity biomechanics of flexion/extension whiplash injuries and Scoliotic deformities in adolescents and adults. Further, full spine technique for common anomalies such as 4 lumbar vertebra versus 6 lumbar vertebrae, and transitional segments affect the sagittal plane alignment of the spine and the required specific adjustive set-ups before thrust. Technique emphasis will be placed on consequent relationship to abnormal posture/spine alignment to correct for facet syndrome and/or intervertebral discs disorders/misalignment.  
**Total Hours:** 77  
**Dates:** June 22-29, 2024  
**Location:** Eagle, ID

### June 22

9AM-12Noon

#### **Analysis and corrective adjusting technique for**

- Introduction to Pediatric Adjusting (Birth – 2 years)
- Frequency and duration of Chiropractic intervention for pediatric populations
- Analysis and Corrective Methods using a variety of technique styles

**3Hr. CE. Lecture/ Technique/ Dachowski**

12Noon-4PM

#### **Technique Spinal analysis/correction of the Pediatric spine for**

- Cervical lordosis:
- Thoracic kyphosis:
- Lumbar lordosis and sacral inclination:
- Pediatric spinal abnormalities:

**4Hr. CE. Lecture/Technique/ Dachowski**

4PM-7PM

#### **Technique Spinal analysis/correction of the Pediatric spine for**

- Atlas laterality,
- Flexion/extension fixations of the CO-C2 joint complex.

**3Hr. CE. Lecture/Technique-CBP/ Dachowski**

### June 23

9AM-1PM

#### **Corrective adjustive technique applied to the spine for correction of subluxation**

- Segmental displacement,
- Posture and spinal displacement patterns,
- Instability at one or more segments,
- Coronal plane Euler buckling methods,
- Sagittal plane or Snap through buckling.
- **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,

**4Hr. CE. Lecture/Technique/Harrison**

- 1PM-3PM     Adjustive technique correction for the Sacro-Iliac Joint subluxation disorders**
- Definitions and Applications: stress, strain, stress-concentrations, centric loading, eccentric loading, material direction, etc.
  - Posture,
  - Kinesiology, and Vector Mechanic
  - Ligamentous anatomy of the SI-Joint complex
  - Biomechanics of the SI-Joint Complex- including loading studies, kinematic studies,
  - Biomechanics of the muscles surrounding the SI Joint complex—piriformis, biceps femoris, gluteus maximus, medius, multifidus, and thoraco-lumbar fascia,
  - Disorders of the SI Joint and treatment intervention strategies.

**2Hr. CE. Lecture/Technique/Harrison**

- 3PM-5PM     Adjustive technique correction for Vertebral Kinematics and Postural Rotations and Translations**
- Sagittal head translation kinematics and range of motion.
  - Sagittal thoracic translation kinematics and ration of motion.
  - Coronal head translation kinematics and range of motion.
  - Coronal thoracic translation kinematics and range of motion

**2Hr. CE. Lecture/Technique/Harrison**

- 5PM-7PM     Technique set-up stations**
- Cervical, thoracic, and lumbo-pelvic corrective training—implementation with indications and contra-indications:
    - a) cervical setups and technique case management,
    - b) thoracic setups and technique case management,
    - c) lumbar setups and technique case management

**2Hr. CE. Lecture/Technique/Harrison**

**June 24**

- 8AM-11AM     Correction for Subluxation in Whiplash Injury Patients**
- Sagittal plane correction of the cervical lordosis;
  - Biomechanical cervical subluxation correction for categories indicative of trauma;

**3 Hr. CE. Lecture/Technique/Katz**

- 11AM- 4PM     Biomechanical, Neurological, and Epidemiologic Aspects of Whiplash Injury**
- Examination and Diagnostic Imaging in the MVC patient.
  - Objectively identifying subluxation in the MVC patient.
  - Quantifying subluxation in the MVC patient: What does the scientific literature tell us?
  - Documentation of the injury in the MVC patient
  - The role of chiropractic care in treating chronic pain patients
  - Patient injuries from MVC's,
  - Whiplash Injury-Treatment Guidelines and Future Care

**5 Hr. CE/ Lecture/ Physiological therapeutics /Katz**

- 4PM-6PM     Mirror Image Cervical Spine Rehabilitation Procedures and Protocols and Case Management & Case Studies of the Cervical Spine in Whiplash Injured Patients**
- How to Progress the injured Patient into Cervical Spine Traction Procedures,
  - CBP cervical rehabilitation in several case reports published in the peer-reviewed

literature.

- CBP equipment and patient needs.
- Types of Lateral Cervical Traction Methods with 16 categories of sagittal subluxations,
- Home traction remodeling orthotics for the cervical spine: Indications & contraindications,
- Case management timing, exams, re-exams using clinical case studies

**2 Hr. CE. Lecture, Technique-CBP /Katz**

**June 25**

**9am-11am Chiropractic Evaluation of the Scoliosis Patient & Outcome Variables**

- Thoracic Posture & Thoraco-Lumbar Coupling Kinematics;
- Differentiation of Thoraco-lumbar Scoliotic Pattern From 'Simple' Postural Spine Displacements;
- Postural Evaluation of the Scoliotic Patient: Rotations and Translations;
- Non-commutative Property of Finite Rotation Angles Under Addition;
- Postural & Stress Bending Views to Assess Potential for Scoliosis Reduction;

**2 Hr. CE. Lecture/Technique/Katz**

**11am-1pm Scoliosis Development Considerations, Indications for Surgical Referral, & Bracing**

- The genetic role in development of scoliosis,
- Genetic trigger, growth modulation, growth maturation, spinal growth and curve progression,
- Categories of scoliosis: juvenile, neurologic, adolescent, adult onset, etc...,
- Indicators for conservative treatment vs. surgical interventions for adolescent vs. adult scoliosis.
- Indicators for SpineCor bracing in Adult scoliosis vs. Adolescent Idiopathic Scoliosis,
- Pain and progression factors in Adult scoliosis,

**2 Hr. CE. Lecture/ Physiological therapeutics /Katz**

**1pm-2pm Biomechanics of Curve Progression,**

- Euler Buckling & Scoliosis Progression;
- Understanding Thoracic Spinal Kinematics and Scoliotic Deformities;
- Evaluation of the Scoliotic Spine: Reliability & Validity of Important Measures;

**1 Hr. CE. Lecture/Technique/Katz**

**2-4pm CBP Technique Principles of Management of Thoraco-lumbar and Thoracic Scoliosis**

- Leg Length Inequality & Sacral Anomalies: Orthotic Intervention;
- Mirror Image® Scoliosis/Postural Stress Views: Indications and Contraindications for CBP® Technique Management of Scoliotic Deformities;
- Conservative Management of Thoraco-lumbar Scoliosis: CBP® Technique Case Presentations;
- Thoracic & Complex Scoliosis: CBP® Technique Case Presentations

**2 Hr. CE. Lecture/Technique/Katz**

**4pm-7pm Continue---CBP Technique Principles of Management of Thoraco-lumbar and Thoracic Scoliosis**

- Thoracic Posture & Thoraco-Lumbar Coupling Kinematics;

- Differentiation of Thoraco-lumbar Scoliotic Pattern From ‘Simple’ Postural Spine Displacements;
- Non-commutative Property of Finite Rotation Angles Under Addition;
- Mirror Image® Scoliosis/Postural Stress Views: Indications and Contraindications for CBP® Technique Management of Scoliotic Deformities;
- Conservative Management of Thoraco-lumbar Scoliosis: CBP® Technique Case Presentations;
- Conservative Management of Thoracic & Complex Scoliosis: CBP® Technique Case Presentations
- Indications and contra-indications for the scoli-roll orthotic.
- Chiropractic and Scoliosis Reduction: A Review of the Literature;

**3 Hr. CE. Lecture/Technique/Betz**

**June 26**

**9:00-11am Review of Sagittal Plane Spinal Model Correlations and Basic Statistical Analysis**

- Biomechanics of posture: Rotations and Translations of the head, thorax, and pelvis,
- Harrison sagittal plane model of the cervical lordosis, thoracic kyphosis, and lumbar lordosis,
- Pediatric, adult, and geriatric alignment for the sagittal spine curvatures,
- Statistical correlations using scatter plots and linear regression models will be detailed so the relationship between sacral angle, lumbar lordosis, thoracic kyphosis, cervical lordosis, and sagittal balance can be understood,
- Variables that influence/alter sagittal plane spine/posture alignment will be introduced: posture, age, vertebral shape, pelvic morphology, sacral morphology, 6 lumbar, 4 lumbar, and transitional vertebra.

**2 Hr. CE. Lecture/Technique/Jaeger**

**11am-1pm Pelvic Morphology Defined:**

- Pelvic morphology is explained and defined: sacral geometry and connection of the sacrum to the ilia relative to the hip axis,
- Pelvic morphology measurement methods: Angle of pelvic incidence (API), Pelvi-sacral angle, PR-S1 pelvic radius method, and Posterior Tangent Pelvic Incidence Angle (PTPIA),
- Pelvic morphology and aging and normative data sets will be detailed.

**2 Hr. CE. Lecture/Technique/Jaeger**

**1pm-3pm Cervical-Thoracic Inlet Morphology Defined**

- Thoracic Inlet angle and correlation to T1 Slope
- Thoracic inlet angle measurement methods
- Cervical lordosis and thoracic inlet angles;

**2 Hr. CE. Lecture/Technique/Jaeger**

**3-6pm Pelvic Morphology Influence on Sagittal Plane Spine Alignment and Geometry**

- Pelvic Morphology influence and correlation to sacral base angle,
- Pelvic Morphology influence and correlation to lumbar lordosis,
- Pelvic Morphology influence and correlation to sagittal translation/balance,
- Pelvic Morphology influence and correlation to thoracic kyphosis,
- Pelvic Morphology influence and correlation to cervical lordosis,
- Linear regression equations to use pelvic morphology to predict sagittal spine alignment in anomalies situations,
- Mock patient cases to assess pelvic morphology’s influence on the spine/posture alignment

**3 Hr. CE. Lecture/Technique/Jaeger**

**6pm-7pm Lumbar Spinal Anomalies and Clinical Case Management**

- 6-Lumbar vertebra: Normative lordosis values and global vertical axis line (VAL) at S1 for sagittal balance and postural alignment,
- 4-Lumbar vertebra: Normative lordosis values and global vertical axis line (VAL) at S1 for sagittal balance and postural alignment,
- Transitional vertebra: Normative lordosis values and global vertical axis line (VAL) at S1 for sagittal balance and postural alignment,
- How to Choose which spinal region to treat/correct first for optimal spinal rehabilitation in simple and full spine subluxation conditions,
- Pelvic Morphology (API = angle of pelvic incidence) examples applied to sagittal plane posture/spine treatment methods and outcomes in a variety of patient conditions;

**1 Hr. CE. Lecture/Technique-CBP / McAviney**

**June 27**

**9am-1pm**

**Biomechanics of Posture Deformities**

- The effects of altered spinal mechanics on the tissues of the body,
- The effects of altered spinal mechanics on the central nervous system,
- The effects of altered spinal mechanics on the peripheral nervous system

**4 Hr. CE. Lecture/ Physiological therapeutics /Murphy**

**1pm-2pm Indications and contraindications for adjusting patients' populations with sagittal plane curve restoration**

- Cervical spine,
- Thoracic spine,
- Lumbar-pelvic region

**1 Hr. CE. Lecture/ Technique/Murphy**

**2pm-5pm Neurophysiology of Abnormal Spinal and Posture Deformity**

- Spinal Cord tethering: how it affects the health of the body, and how to manage by chiropractors
- The chiropractic affects of chronic pain from trauma: what is nerve sprouting,
- Hyper-reinnervation, denervation supersensitivity and neurospinal learning,
- The relationship between altered spinal mechanics, proprioception and systemic health,
- The relationship between altered spinal mechanics and myofascial pain syndrome/ fibromyalgia syndrome and chiropractic subluxation complexes

**3 Hr. CE. Lecture/ Technique/Murphy**

**5pm-7pm The Role of the Sympathetic Nervous System in Systemic Health**

- How Chiropractic affects the sympathetic nervous system,
- The reflex nerve interference: definition of nerve compression nerve interference and predominance in chiropractic practice and its inter-relationship,
- Including rheumatoid arthritis, systemic lupus erythematosus, psoriasis, Grave's Disease, multiple sclerosis, etc),
- Allergies, asthma, chronic fatigue syndrome, ear infections, hypertension, colds,

**2 Hr. CE. Lecture/Technique/Murphy**

**June 28**

**9am-11am**

**Course summary and review of important material**

- The effects of altered spinal mechanics on the tissues of the body will be reviewed as presented in the course material,
- Case study presentation requirements:
  - A. Important features of the clinical case study,
  - B. Reliable and valid documentation and outcome measures for pain, disability, function, posture, and spine analysis.

**2 Hr. CE. Lecture/ Physiological therapeutics /Ferrantelli**

**11am-1pm    CBP Randomized and Non-Randomized Trials Discussed and Perspective**

- Non-randomized sagittal cervical spine clinical trials reviewed and discussed
- Randomized sagittal cervical spine clinical trials reviewed and discussed
- Non-randomized clinical trials for posture translations reviewed and discussed
- Non-randomized sagittal Lumbar spine clinical trial reviewed and discussed
- Randomized sagittal Lumbar spine clinical trials reviewed and discussed

**2 Hr. CE. Lecture, Physiological therapeutics /Ferrantelli**

**1pm-3pm    CBP Postural Adjusting Stations**

- 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.

**2 Hr. CE. Lecture/ Technique/Ferrantelli**

**3pm -5pm    Mirror Image Posture / Spine and Exercise Traction Procedures and Protocols**

- Types and application of Thoraco-Lumbar pelvic traction set up
  1. Universal traction setups standing and sitting
  2. Denneroll table traction setups side lying, prone and supine
  3. Meyer wall mounted full spine standing and seated setups.
- 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.
- Types and application of Posture and Spine exercise procedures for the CBP clinician.
  1. How to merge posture-spine correction and functional movements together to enhance patient outcomes.
  2. Lower extremity / hip mobility exercises for acute and chronic cases
  3. Lumbar and Pelvic region exercises for acute and chronic cases
  4. Cervico-thoracic exercises for acute and chronic case.

**2 Hr. CE. Lecture/ Physiological therapeutics /Harrison**

**5pm -7pm    Mirror Image "Correction Potential" or Stress Posture and Imaging Analysis**

- Types of posture and spine stress imaging and corrective setups. How to know you're on the track of correction
  1. Denneroll setups using the Denneroll table
  2. Scoli-roll setups side lying
  3. Posture combination stress imaging for posture correction. How to know which sequence is best for scoliosis reduction.
  4. 3-D imaging vs. 2-D imaging evaluation.

**2 Hr. CE. Lecture/Technique/Harrison**

**June 29**

**9am-11am**

**Chiropractic Evaluation of the Scoliosis Patient & Outcome Variables**

- Thoracic Posture & Thoraco-Lumbar Coupling Kinematics;
- Differentiation of Thoraco-lumbar Scoliotic Pattern From 'Simple' Postural Spine Displacements;
- Postural Evaluation of the Scoliotic Patient: Rotations and Translations;

**2 Hr. CE. Lecture/Technique/ Harrison**

**11am-1pm**

**New 3-D Posture Scanning Techniques**

- Postural Evaluation of the Scoliotic Patient in 3-D
- Using postural scans to aid in the development of proper braces.

**2 Hr. CE. Lecture/Technique/ Harrison**

**1pm-4pm**

**Scoliosis Indications for Bracing**

- Growth modulation, growth maturation, spinal growth and curve progression,
- Categories of scoliosis: juvenile, neurologic, adolescent, adult onset,

**3 Hr. CE. Lecture/Physiological therapeutics/ Harrison**