



**Chiropractic BioPhysics**  
*CBP—The Science of Spinal Health*

**2010 CBP® Drop Table Adjusting Seminar**  
**March 13-14; San Diego, CA**  
**November 20-21; Dallas, TX**

- Course Title:** Drop Table Adjusting, Leg Length Inequality & Orthotic Intervention
- Instructors:** Dr. Deed Harrison, Dr. Pete Lope, Dr. Joe Ferrantelli, Dr. Jason Haas, Dr. Alyson Evans, Dr. Ed Glaser, 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.

**Total Hours:** 12

**Saturday**  
**9am-11pm**

**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
- **Structural**
  - Segmental displacement
  - Posture and spinal displacement patters
  - 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,
- **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.



- Anterior head translation and patient disorders: Cephalgia 1993 & Headache 1999,
- Sagittal plane posture abnormalities and kinematics: Clin Biom 2004,

**2 Hr. CE. Lecture; Clinical Sciences**

**D. Harrison, P. Lope, J. Haas**

**11pm-1pm Objective Measurements of Postural Displacements**

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

**2 Hr. CE. Lecture; Examination**

**D. Harrison, J. Ferrantelli**

**1pm-2pm**

**LUNCH**

**No CE Credits**

**2pm-3pm 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.

**1 Hr. CE. Lecture; Technique-CBP)**

**D. Harrison, P. Lope, J. Haas**

**3pm-4pm Biomechanical Assessment and Orthotic Intervention of foot Deformities**

- Understand the rationale for exploring a new approach to biomechanical management of the foot and lower kinetic chain.
- Explain the basic geometry and arthrokinetics of the subtalar joint during stance phase gait.
- Describe how the subtalar joint affects the posture of the foot in supination and pronation.
- Relate changes in posture during foot pronation and supination to their functional requirements in gait.
- Explain the role of the first metatarsal during forefoot loading and how it changes depending on the pronated or supinated postures of the foot.
- Explain the main design options for a MASS-type orthotic.
- Describe rationales for MASS orthotic adjustment.
- List the important considerations for orthotic dispense and follow-up and the common troubleshooting situations.

**1 Hr. CE. Lecture; Clinical Sciences**

**A. Evans, E. Glaser, S. Currie, D. Harrison**

**4pm-6pm Practical Station Demonstrations**

- Drop Table Mirror Image Adjustments:
  - a) AP Cervical Drop Table Mirror-Image Adjusting,
  - b) AP Thoracic Drop Table Mirror-Image Adjusting,
  - c) AP Pelvic Drop Table Mirror-Image Adjusting.
- PosturePrint Postural Analysis,
- Instrument Adjusting for postural displacements,
- Assessing the patient for orthotic intervention.

**2 Hr. CE. Lecture/Lab; Technique-CBP) D. Harrison, P. Lope, J. Haas, J. Ferrantelli, D. Evans, E. Glaser, S. Currie**



## **Sunday**

**8am-10pm**

### **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,

**2 Hr. CE. Lecture; Clinical Sciences**

**D. Harrison, P. Lope, J. Haas**

**10am-11pm**

### **A Review of 3 Clinical Trials Using CBP Drop Table Adjusting**

- Randomized trial comparing CBP Technique to Palmer package for chronic pain disorders,
- Non Randomized clinical control trial using CBP Technique for correction of lateral head translations in patients with chronic neck pain: JRRD 2004,
- Non Randomized clinical control trial using CBP Technique for correction of lateral trunk translations in patients with chronic low back pain: ESJ 2005,

**1 Hr. CE. Lecture; Clinical Sciences**

**D. Harrison, P. Lope, J. Haas**

**11pm-Noon**

### **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.

**1 Hr. CE. Lecture; Technique-CBP**

**D. Harrison, P. Lope, J. Haas**