



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

**2018**  
**Module 9. CBP® Neurology, Posture, & Systemic Health**

**Course Title:** Neurology, Posture & Systemic Health

**Instructors:** Dr. Daniel Murphy and Dr. Deed Harrison

**Course Objective:** To provide a current education in the biomechanics and neuro-physiology of posture deformities as they relate to Systemic Health of the human. Detailed neuro-physiology of the central and peripheral nervous systems will be reviewed. Emphasis is placed on mechano-sensitive afferent nerve supply of the ligaments and muscles and their consequent relationship to abnormal posture/spine alignment and visceral dysfunction (Type O Disorders). Mechano-sensitive nerve endings in the facet capsular ligaments, spinal ligaments, intervertebral discs and muscles will be reviewed. This information forms the scientific rationale for the hypothesis of a Nerve Interference Theory based upon deformation of tissue mechano-receptors from abnormal tissue loading in abnormal posture and spinal alignment.

**Total Hours:** 12

**Saturday**  
**9am-12pm**

**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

**3 Hr. CE. Lecture, Anatomy/Physiology**

**Noon-1pm** **The Patho-anatomical Reasons for the Need of Chiropractic Healthcare**  
**1 Hr. CE. Lecture, Anatomy/Physiology**

**1pm-2pm** **Indications and contraindications for prescribing home orthotics to patients populations for sagittal plane curve restoration**

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

**2pm-6pm** **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 affect 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

**4 Hr. CE. Lecture, Anatomy/Physiology**

**6pm-7pm**

**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.

**1 Hr. CE, Lecture, Technique – CBP**

**D. Harrison**

**Sunday**

**9am-10am**

**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,

**1 Hr. CE. Lecture, Anatomy/Physiology**

**10am-Noon**

**Neurophysiological and Biochemical Basis for Chiropractic & Nutritional Management of Chronic Pain & Disease**

- Including rheumatoid arthritis, systemic lupus erythematosus, psoriasis, Grave's Disease, multiple sclerosis, etc),
- Allergies, asthma, chronic fatigue syndrome, ear infections, hypertension, colds,
- Other systemic diagnosed diseases

**2 Hr. CE. Lecture, Anatomy/Physiology**