



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

**2022**

## **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

**Noon – 1pm**

#### **The Patho-anatomical Reasons for the Need of Chiropractic Healthcare**

**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 super sensitivity 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

**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.

**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

**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