



Chiropractic BioPhysics
CBP—The Science of Spinal Health

June 24, 2024

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: 10

Monday

8am – 11am 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

11am – 12pm The Patho-anatomical Reasons for the Need of Chiropractic Healthcare

12pm – 1pm Indications and contraindications for prescribing home orthotics to patients populations for sagittal plane curve restoration

- Cervical spine
- Thoracic spine
- Lumbar-pelvic region

1pm – 4pm 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

4pm – 6pm

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
- 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