

# **Dennis J. Long D.C.**

Jamaica Chiropractic & Physical Therapy PLLC.  
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235 Forest Ave.  
Emerson, NJ 07630  
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## **OCCUPATIONAL HISTORY**

Chiropractor/Owner, Jamaica Chiropractic & Physical Therapy, Jamaica, New York, 2018 - Present

Chiropractor/Owner, Bergen County Family Chiropractic, P.A. d/b/a/ Bergen Physical Therapy & Spinal Rehab, Emerson, New Jersey, 2006-Present

Chiropractor/Owner, Multicare Chiropractic d/b/a AAdvanced Chiropractic, Jamaica, New York, 2000 - Present

Chiropractor/Associate, Grand Concourse Chiropractic, Bronx, New York, 1999-2000

Chiropractor/Associate, Center Moriches Chiropractic, Center Moriches, New York, 1998-1999

## **EDUCATION AND LICENSURE**

Certificate in Diagnostic imaging, Interpreting Spinal Trauma with MRI, 12 Credit Hours, Association of New Jersey Chiropractors, Hazlet, New Jersey, 2008

Certificate in Diagnostic imaging, Interpreting Spinal Trauma with MRI, 6 Credit Hours, Association of New Jersey Chiropractors, Hazlet, New Jersey, 2008

Infection Control Certification for New York State Licensure, Number CRT-1035526, 2008

The University of the State of New York, Education Department, Office of the Professions, Registration Certificate # 6823640.

New York State Workers Compensation Board, authorization to render treatment under Workers Compensation law # CO9038-B.

New York State Workers Compensation Board, authorizing independent medical examinations under Workers Compensation Law # CO9038-B.

New Jersey License to Practice Chiropractic, The State of New Jersey Department of Law and Public Safety, Division of Consumer Affairs, State Board of Chiropractic Examiners, License Number 38MC00559500, 2000- Present

New York License to Practice Chiropractic, The University of the State of New York, Education Department, License Number X009038, 1998- Present

National Board of Chiropractic Examination, Part I, General anatomy, Spinal anatomy, Physiology, Chemistry, Pathology, Microbiology and Public health. Greeley, Colorado 1997

National Board of Chiropractic Examination, Part II, – General diagnosis, Neuromusculoskeletal diagnosis, Diagnostic imaging (X-Ray/M.R.I.), Principles of chiropractic, Chiropractic practice, Associated clinical sciences. Greeley, Colorado 1997

National Board of Chiropractic Examination, Part III, Comprehensive written clinical competency examination covering Part I and Part II. Greeley, Colorado 1998

National Board of Chiropractic Examination, Part IV, Comprehensive written and practical clinical competency examination covering Parts I, II and III. Greeley, Colorado 1998

National Board of Chiropractic Examiners, Physiotherapy, Indications, proper utilization and complications from active and passive physiotherapy. Greeley, Colorado 1998

Doctor of Chiropractic, New York Chiropractic College, Seneca Falls, New York, 1998

Bachelor of Arts, Seton Hall University, South Orange, New Jersey, 1991

## **SELECTED POST-GRADUATE EDUCATION AND CERTIFICATIONS**

**Primary Spine Care - Credentials and Knowledge Base**, *The credentials and knowledge based from an academia perspective when cooperatively treating in a collaborative environment inclusive of understanding pathology and mechanical spine issues.* **Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2020**

**Primary Spine Care - Spinal Biomechanical Engineering and MRI Spine Interpretation**, *Integrating Spinal Biomechanical Engineering and MRI Spine Interpretation into a primary spine care model, inclusive of necessity and acquisition protocols. A comprehensive review the latest evidence in documenting mechanical issues.* **Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2020**

**Primary Spine Care - Hospital Administration, Triage, Clinical Requirements and Collaborative Relationships with Medical Specialists**, *Understanding hospital and medical specialis's care paths for mechanical spine pathology and integrating the doctor of chiropractic in the hospital and allopathic treatment protocols.* **Cleveland University - Kansas City, Long Island, NY, 2020**

**Primary Spine Care - Contemporary Spine Research and Documentation, *Central nervous system connection and the thalamus, hypothalamus connection in both ascending and descending central pathways with neuro-endocrine implications that have the mechanisms to be a component of Schizophrenia, Dementia and Alzheimer's with a linear relationship to the chiropractic spinal adjustment and chronic pain.* Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2020**

**Connective Tissue Spinal Disc Permanent Pathology, Primary Spine Care, *Herniated, bulged, protruded and extruded discs, etiology and morphology. Age-dating disc pathology inclusive of Modic changes, piezoelectric effect, Wolff's Law and radicular clinical presentation.* Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY 2020**

**Connective Tissue Pathology and Research, Primary Spine Care, *Utilization in spinal models considering the opioid abuse and various spinal models in contemporary health care. Care paths for mechanical spine pain and the evidence for conservative chiropractic care.* Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY 2020**

**Bio-Neuro-Mechanical Lesions and Spine Care, Primary Spine Care, *Mechanoreceptor, proprioceptor, nociceptor innervation and control of the spinal system with central nervous system action and interaction. The integration of the pain processing network and the HPA Axis (hypothalamus, adrenal and pituitary) with the chiropractic spinal adjustment.* Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY 2020**

**Ethics, Documentation and Research, Primary Spine Care, *Maintaining ethical Interprofessional relationships based upon an evidenced based practice inclusive of triage, diagnostics and reporting. Creating thorough documentation that reflects your complete findings encompassing descriptive ICD-10 codes and concludes the presence or absence of pathology.* Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY 2020**

**Evidenced Based Care in a Collaborative Setting; Primary Spine Care 5, *A literature based model for collaborating with hospitals, medical primary care providers and specialists. Reviewing the documentation requirements to communicate the diagnosis, prognosis and treatment plans with medical entities and having the evidence as a basis for those recommendations.* Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island, NY, 2020**

**Current Literature Standards of MRI Spine Interpretation; Primary Spine Care 5, *MRI Spine Interpretation of the spine. How to triage a trauma and non-trauma with advanced imaging and document the necessity. We will also cover the basics of MRI Spine Interpretation inclusive of all types of herniations, bulges,* Academy of Chiropractic Post-Doctoral Division. Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island, NY, 2020**

**Spine Brain Connection in Pain Pathways; Primary Spine Care 5, MRI Spine** *The spine-brain connection in managing chronic pain patients. Understanding how chronic pain negatively affects brain morphology and potential pathology as sequella. The role of chiropractic in preventing the loss of gray matter and the most recent evidence as outlined in indexed peer reviewed literature over the last 10 years verifying chiropractic's role.* **Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island, NY, 2020**

**Bio-Neuro-Mechanical Mechanism of the Chiropractic Spinal Adjustment; Primary Spine Care 5,** *The biological, neurological and mechanical mechanisms and pathways from the thrust to the dorsal horn and brain connection and how the brain processes the chiropractic spinal adjustment based upon the literature. Care paths of chiropractic and physical therapy from an outcome basis,* **Academy of Chiropractic Post-Doctoral Division. Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island, NY, 2020**

**Electrodiagnostics Module 1: Electromyogram/Nerve Conduction Velocity (EMG/NCV), Diagnosis & Interpretation: Anatomy and Physiology of Electrodiagnostics:** *An in-depth review of basic neuro-anatomy and physiology dermatomes and myotomes to both the upper and lower extremities and the neurophysiology of axons and dendrites along with the myelin and function of saltatory for conduction. The sodium and potassium pump's function in action potentials.* **Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2019**

**Electrodiagnostics Module 1: Electromyogram/Nerve Conduction Velocity (EMG/NCV), Diagnosis & Interpretation: Nerve Conduction Velocity (NCV) Part 1:** *Nerve conduction velocity testing, the equipment required and the specifics of motor and sensory testing. This section covers the motor and sensory NCV procedures and interpretation including latency, amplitude (CMAP) physiology and interpretation including the understanding of the various nuances of the wave forms.* **Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2019**

**Electrodiagnostics Module 3: Electromyogram/Nerve Conduction Velocity (EMG/NCV), Diagnosis & Interpretation: Nerve Conduction Velocity (NCV) Part 2:** *Compound motor action potentials (CMAP) and sensory nerve action potentials (SNAP) testing and interpretation including the analysis and diagnosis of the wave forms. It also covers compressive neuropathies of the median, ulnar and posterior tibial nerves; known as carpal tunnel, cubital tunnel and tarsal tunnel syndromes. This section offers interpretation algorithms to help understand the neurodiagnostic conclusions.* **Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2019**

**Electrodiagnostics Module 4: Electromyogram/Nerve Conduction Velocity (EMG/NCV), Diagnosis & Interpretation: Needle Electromyogram (EMG) Studies:** *The EMG process, inclusive of how the test is performed and the steps required in planning and electromyographic study. This covers the spontaneous activity of a motor unit action potential, positive sharp waves and fibrillations. The insertional activity (both normal and abnormal), recruitment activity in a broad polyphasic presentation and satellite potentials. This covers the diagnosing of patterns of motor unit abnormalities including neuropathic demyelinated neuropathies along with acute myopathic neuropathies. This section also covers the ruling out of false positive and false negative results.* **Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2019**

**Electrodiagnostics Module 5: Electromyogram/Nerve Conduction Velocity (EMG/NCV), Diagnosis & Interpretation: Overview of EMG and NCV Procedures, Results, Diagnoses and Documentation.** *The clinical incorporation of electrodiagnostic studies as part of a care plan where neuropathology is suspected. It also covers how to use electrodiagnostics in a collaborative environment between the chiropractor as the primary spine care provider and the surgeon, when clinically indicated. This section covers sample cases and health conclude and accurate treatment plans based upon electro-neurodiagnostic findings when clinically indicated.* **Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2019**

**Documentation, MRI Necessity and Trends in Spinal Treatment Protocols, Correlating history and a thorough clinical evaluation in determining the necessity for x-ray and MRI evaluations in the trauma and non-trauma patient. Considering whole spine patho-biomechanics in formulating treatment plans and long-term supportive care. Documentation requirements in transitioning from telemedicine to in-office care.** **Academy of Chiropractic Post-Doctoral Division, PACE Approved for the Federation of Chiropractic Licensing boards, Cleveland University Kansas City, Long Island, NY, 2020**

### **Module 1-Stroke Anatomy and Physiology Part 1**

**Stroke Anatomy and Physiology: Brain Vascular Anatomy,** *The anatomy and physiology of the brain and how blood perfusion effects brain function. A detailed analysis of the blood supply to the brain and the physiology of ischemia.* **Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2020**

**Module 1 Objective:** To understand the anatomy and physiology of brain hemodynamics and stroke types

### **Module 2-Stroke Anatomy and Physiology Part 2**

**Stroke Anatomy and Physiology: Stroke Types and Blood Flow,** *Various types of stroke identifying ischemia, hypoperfusion, infarct and penumbra zones and emboli. Cardiac etiologies and clinical features as precursor to stroke with associated paradoxical emboli and thrombotic etiologies. Historical and co-morbidities that have etiology instroke inclusive of diabetes, coagulopathy, acquired and hereditary deficiencies.* **Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2020**

**Module 2 Objective:** To understand stroke types and etiologies both historical and historical risk factors

### **Module 3-Stroke Principles of Treatment an Overview for the Primary Care Provider**

**Stroke Principles of Treatment an Overview for the Primary Care Provider**, *Stroke type and treatments performed by vascular specialists. The goals of treatment with the physiology of the infarct and penumbra zones and the role of immediate triage in the primary care setting. Detailing the complications of stroke and future care in the chiropractic, primary care or manual medicine clinical setting. Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2020*

**Module 3 Objective:** To understand stroke treatment and the role of the primary care provider in early detection and triage

### **Module 4-Clinical Evaluation & Protocols for Identifying Stroke Risk**

**Clinical Evaluation and Protocols for Identifying Stroke Risk**, *The neurological history and examination for identifying stroke risks with a focus on supra and infratentorial regions, upper and lower motor lesions, cranial nerve signs, spinal cord pathology, motor and sensory pathology and gait abnormalities. Examining genetic and family histories along with dissection risk factors. Stroke orthopedic testing and clinical guidelines pertaining to triage for the primary care provider. Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2020*

**Module 4 Objective:** To understand stroke/neurological evaluation and triage clinical guidelines

**Accident Reconstruction: Terms, Concepts and Definitions**, *The forces in physics that prevail in accidents to cause bodily injury. Quantifying the force coefficients of vehicle mass and force vectors that can be translated to the occupant and subsequently cause serious injury. Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2020*

**Accident Reconstruction: Terms, Concepts and Definitions**, *The forces in physics that prevail in accidents to cause bodily injury. Quantifying the force coefficients of vehicle mass and force vectors that can be translated to the occupant and subsequently cause serious injury. Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2020*

**Accident Reconstruction: Causality, Bodily Injury, Negative Acceleration Forces, Crumple Zones and Critical Documentation**, *Factors that cause negative acceleration to zero and the subsequent forces created for the vehicle that get translated to the occupant. Understanding critical documentation of hospitals, ambulance reports, doctors and the legal profession in reconstructing an accident. Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2020*

**Accident Reconstruction: Skid Marks, Time, Distance, Velocity, Speed Formulas and Road Surfaces**, *The mathematical calculations necessary utilizing time, distance, speed, coefficients of friction and acceleration in reconstructing an accident. The application of the critical documentation acquired from an accident site. Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2020*

**Accident Reconstruction: Research, Causality and Bodily Injury**, *Delta V issues correlated to injury and mortality, side impact crashes and severity of injuries, event data recorder reports correlated to injury, frontal impact kinematics, crash injury metrics with many variables and inquiries related to head restraints.* **Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2020**

**Orthopedic Testing: Principles, Clinical Application and Triage**, *Integration of orthopedic testing in the clinical setting to develop a differential diagnosis. Utilizing radiographic and advanced imaging inclusive of MRI and CAT scan findings to verify tissue pathology suspected by orthopedic testing conclusions and developing a treatment plan as sequelae.* **Cleveland University Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2019**

**Orthopedic Testing: Cervical Spine**, *Integration of cervical orthopedic testing in the clinical setting to develop a differential diagnosis. Utilizing radiographic and advanced imaging inclusive of MRI and CAT scan findings to verify tissue pathology suspected by orthopedic testing conclusions and developing a treatment plan as sequelae.* **Cleveland University Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2019**

**Orthopedic Testing: Cervical Spine**, *Integration of cervical orthopedic testing in the clinical setting to develop a differential diagnosis. Utilizing radiographic and advanced imaging inclusive of MRI and CAT scan findings to verify tissue pathology suspected by orthopedic testing conclusions and developing a treatment plan as sequelae.* **Cleveland University Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2019**

**Orthopedic Testing: Lumbar Spine**, *Integration of lumbar orthopedic testing in the clinical setting to develop a differential diagnosis. Utilizing radiographic and advanced imaging inclusive of MRI and CAT scan findings to verify tissue pathology suspected by orthopedic testing conclusions and developing a treatment plan as sequelae.* **Cleveland University Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2019**

**Orthopedic Testing: Clinical Grand Rounds**, *how to integrate orthopedic testing in the clinical setting utilizing both simple and complex patient scenarios. It includes potential stroke, or vertebrobasilar insufficient patients and understanding the nuances in a clinical evaluation with orthopedic testing as a critical part of the evaluation and screening process. How to integrate orthopedic testing in the clinical setting utilizing both simple and complex patient scenarios. It includes potential stroke, or vertebrobasilar insufficient patients and understanding the nuances in a clinical evaluation with orthopedic testing as a critical part of the evaluation and screening process.* **Cleveland University Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2019**

**Trends in Spinal Treatment, Migration of spinal care for mechanical spine issues from hospitals and medical specialists to trauma qualified chiropractors based upon published outcomes. Utilizing imaging studies in spinal biomechanics, pain models and clinical outcomes to determine a conclusive diagnosis, prognosis and treatment plan for triaging in a collaborative environment. Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2019**

**Neurology of Spinal Biomechanics, Understanding the normal of spinal biomechanics and the neurotransmitters required for homeostasis. The interconnected role of Pacinian Corpuscles, Ruffini Corpuscles, Golgi Organ Receptors, Nociceptors, Proprioceptors and Mechancoreceptors in maintaining sagittal and axial alignment in the presence of mechanical pathology. Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2019**

**MRI Age-Dating of Herniated Discs, The literature, academic and clinical standards to age-date herniated discs. The clinical correlation the pain patters with advanced imaging findings of bone edema, spurs based upon the Piezoelectric effect fo remodeling, high signal on T2 weighted images, Vacuum Discs and disc heights in determining the time frames of the etiology of the spinal disc pathology. Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2019**

**Creating Ethical Collaborative and Medical-Legal Relationships, Understanding the timely triage necessities based upon clinical and imaging outcomes and the documentation required for collaborative physicians to continue care. Ensuring that the documentation is complete, reflective of services rendered and clear for third party consideration in an admissible format to considered in a medical-legal environment. Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2019**

**Central Innervation of Spinal Biomecinacal Engineering, Understanding the lateral and ventral horn's innovations of Pacinian Corpuscles, Ruffini Corpuscles, Golgi Organ Receptors, Nociceptors, Proprioceptors and Mechancoreceptors and the pathways through the spinal thalamic tracts through the periaqueductal region, the Thalamus into the Occipital, pre-frontal, sensory and motor cortexes and the efferently back through the Thalamus to disparate regions in creating spinal homeostasis, Pacinian Corpuscles, Ruffini Corpuscles, Golgi Organ Receptors, Nociceptors, Proprioceptors and Mechancoreceptors. Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2019**

**Identifying Spinal Pathology of MRI, Utilizing T1, T2, STIR and Gradient studies in determining myelomalacia, intra and extra-dural tumors and systemic disease patterns affecting the spinal cord. When to use contrast post-operatively in identifying discal structures vs. adhesions on postoperative advanced imaging. MRI Interpretation of herniated, circumferential bulges, focal bulges, protruded, extruded, comminuted, sequestered and fragmented discs. When to consider a neurosurgical consultation based upon the correlation of imaging and clinical findings. Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2019**

**Computerized Mensuration of Spinal Biomechanical Pathology**, *Understanding the algorithmic interpretation of spinal biomechanical pathology in a 3-D model and creating treatment plans, impairment ratings and teaching models based upon the vertebral motor unit angles. Determining sagittal and axial alignments in creating a normative baseline for treatment goals and outcomes.* Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2019

**Neurosurgical-Chiropractic Collaboration on Spinal Pathology**, *Utilizing x-ray, MRI and other modalities of advanced imaging in conjunction with spinal biomechanical failure and clinical evaluation to collaboratively create treatment protocols for patients in both the operative and non-operative cases. Determining the boundaries of scope of care for both the chiropractor and neurosurgeon based upon a definitive diagnosis of the mechanical vs. an anatomical lesion.* Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2019

**Documentation and Ethics in Medical-Legal Relationships**, *Creating ethical relationships based upon accurate documentation reflective of the casually related condition of the injured. Ensuring accepted credentials of the doctor based upon Voir Dire standards reflected in an admissible curriculum vitae. How to present demonstrative documentation in the courts reflective of the patient's pathology.* Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2019

**Coding, Documentation and Compliant Coding**, *Ensuring the correct codes are utilized in an evaluation and management encounter. The correct elements are utilized to support the level of E&M coded along with a self-audit program to ensure ethical billing occurs. Guidelines for history of present illness, primary complaint, review of systems, family, social and past histories are discussed and how to document the same.* Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2019

**Spinal Trauma Pathology, Triage and Connective Tissue Injuries and Wound Repair**, *Triaging the injured and differentially diagnosing both the primary and secondary complaints. Connective tissue injuries and wound repair morphology focusing on the aberrant tissue replacement and permanency prognosis potential.* Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2019

**Spinal Trauma Pathology, Ligament Anatomy and Injury Research and Spinal Kinematics**, *Spinal ligamentous anatomy and research focusing on wound repair, future negative sequelae of abnormal tissue replacement and the resultant aberrant kinematics and spinal biomechanics of the spine.* Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo  
**Computerized Mensuration of Spinal Biomechanical Pathology**, *Understanding the algorithmic interpretation of spinal biomechanical pathology in a 3-D model and creating treatment plans, impairment ratings and teaching models based upon the vertebral motor unit angles. Determining sagittal and axial alignments in creating a normative baseline for treatment goals and outcomes.* Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2019

**Spinal Trauma Pathology, Spinal Biomechanics, Central Nervous System and Spinal Disc Nomenclature**, *The application of spinal biomechanical engineering models in trauma and the negative sequelae it has on the central nervous system inclusive of the lateral horn, periaqueductal grey matter, thalamus and cortices involvement.* Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2019

**Spinal Trauma Pathology, Biomechanics of Traumatic Disc Bulge and Age Dating Herniated Disc Pathology**, *The biomechanics of traumatic disc bulges as sequelae from trauma and the comorbidity of ligamentous pathology. Age-dating spinal disc pathology in accordance with Wolff's Law.* Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2019

**Spinal Trauma Pathology, Clinical Grand Rounds**, *The review of case histories of mechanical spine pathology and biomechanical failures inclusive of case histories, clinical findings and x-ray and advanced imaging studies. Assessing comorbidities in the triage and prognosis of the injured.* Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2019

**Spinal Trauma Pathology, Research Perspectives**, *The review of current literature standards in spinal trauma pathology and documentation review of biomechanical failure, ligamentous failure and age-dating disc pathology.* Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2019

**Impairment Rating**, *The understanding and utilization of the protocols and parameters of the AMA Guide to the Evaluation of Permanent Impairment 6th Edition. Spine, neurological sequelae, migraine, sexual dysfunction, sleep and arousal disorders, station and gait disorders and consciousness are detailed for impairment rating. Herniated discs, radiculopathy, fracture, dislocation and functional loss are also detailed in relation to impairment ratings.* **Cleveland University - Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2019**

**Medical-Legal-Insurance Documentation**, *Accurate and compliant documentation of history and clinical findings inclusive of functional losses, loss of activities of daily living, duties under duress and permanent loss of enjoyment of life. Prognosing static vs. stable care, gaps in care both in the onset and in the middle of passive care with a focus on detailed diagnosing. The integration of chiropractic academia, the court system and the insurance reimbursers' requirements for complete documentation.* **Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, Documentation and Legal Testimony**, *Report writing for legal cases, the 4 corners of a narrative and documenting damages with understanding defense medical documentation and consistent reporting of bodily injuries.* **Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, Documentation and Legal Testimony, Part 2, *Understanding report writing and the types of medical reports required for court inclusive of diagnosis, prognosis and treatment plans with requirements of reporting causality and permanency.* Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, Documentation and Direct Testimony, *Organizing your documentation and understanding all collaborative documentation and how it fits into your diagnosis, prognosis and treatment plan, Understanding the nuances of the functional losses of your patients related to their bodily injuries,* Academy of Chiropractic, Post-Doctoral Division. Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, Documentation and Direct Testimony Part 2, *Utilizing demonstrative documentation in direct examination and communicating the results of your care concurrently with the written documentation and reporting an accurate diagnosis for all images.* Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, Documentation and Direct Testimony Part 3, *The evaluation, interpretation and reporting of collaborative medical specialists results and concluding an accurate diagnosis inclusive of all findings and reviewing all images to ensure an accurate diagnosis.* Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, Documentation and Direct Testimony Part 4, *Determining and documenting disabilities and impairments inclusive of loss of enjoyment of life and duties under duress and the evaluation and validation of pain and suffering.* Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, Documentation and Cross Examination Testimony, *Reporting your documentation factually and staying within the 4 corners of your medical report and scope of practice inclusive of understanding how your credentials allow you to report your documentation.* Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, A Documentation Relationship Between the Doctor and Lawyer, *The level of organization required in a medical-legal case that accurately reflects the bodily injuries of your patients and the time constraints in rendering an accurate report.* Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, Report Writing and Preparing for a Legal Case, *Reviewing the facts of the case inclusive of your documentation, the defense medical examiner, medical specialists and the attorney to ensure accurate and consistent reporting.* Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Medical-Legal Ethical Relationships, Report Writing and Preparing for a Legal Case,** *Creating demonstrative evidence, visuals of your patient's bodily injuries inclusive of x-rays, MRI's, CAT Scans and electrodiagnostic findings, the spinal biomechanics of herniated disc with ipsilateral findings and contralateral symptomatology.* **Academy of Chiropractic, Post-Doctoral Division, Cleveland University-Kansas City, College of Chiropractic, Long Island, NY, 2019**

**Mild Traumatic Brain Injury/Traumatic Brain Injury/Concussion,** *Differentially diagnosing mild traumatic brain injury vs. traumatic brain injury and the clinical and imaging protocols required to conclude an accurate diagnosis for head trauma.* **Texas Chiropractic College, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2018**

**Connective Tissue Pathology, Spinal Biomechanics as Sequella to Trauma, MRI Spine Interpretation, Ordering Protocols & Triaging the Injure,** *The latest research on the 6 ways to age-date disc herniations and bulges from trauma inclusive of disc pathology nomenclature. MRI ordering protocols, inclusive of Dixon format and fat-suppressed images. The neurology and pathology of connective tissue and the sequella of trauma at the biomechanical level leading to bio-neuro-mechanical failure. Contemporary evidenced-based building blocks for triaging and in a collaborative environment.* **Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2018**

**Spinal Biomechanical Engineering Digitizing,** *Integrating automated mensuration into creating treatment plans and determining maximum medical improvement. A literature-based study of normal vs. abnormal motor unit function. Determining ligamentous laxity, alteration of motion segment integrity and pathological stress units and whole person impairments based upon the literature and academic standards,* **Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2018**

**Science of the Chiropractic Spinal Adjustment and Vertebral Subluxation,** *The literature-based definitions of both the mechanisms the chiropractic adjustment and how it affects the central nervous system in pain pathways and systemic issues that is the arbiter for normal vs. abnormal function. The physiological mechanisms of how the chiropractic spinal adjustment affects the peripheral and central nervous systems. Subluxation degeneration/Wolff's Law will be detailed from a literature perspective combined with the mechanism of subluxation (bio-neuro-mechanical lesion). A literature perspective why long-term chiropractic care is clinically indicated as usual and customary to effectuate demonstrable biomechanical changes in the spine. An evidenced-based perspective of why physical therapy is a poor choice for spine as a 1<sup>st</sup> referral option for any provider inclusive of the literature.* **Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2018**

**Documentation, Collaboration, and Primary Spine Care,** *An academic basis for documentation that is usual and customary across professions in collaborative care. Maintaining ethical medical-legal relationships based upon Voir Dire and Daubert standards with ensuring a 4-corners inclusive report. Ensuring Primary Care Status based upon an academic standards.* **Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2018**

**Spinal Biomechanical Engineering Analysis**, *Understanding spinal motor units as it relates to the Cartesian system and normal vs. pathological movement. Analyzing normal coupling functions of the spine in relations to gait and pelvic biomechanical function and determining stress units and standards of deviation of segmental dysfunction. Interpreting mensuration lines and block analysis beyond standards of deviation in spinal motor dysfunction about connective tissue failure.* **PACE Approved for the Federation of Chiropractic Licensing Board, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2018**

**Spinal Biomechanical Engineering Pathology and Clinical Application**, *Integrating pathological function based upon the Cartesian system and digital mensuration in developing treatment plans with diagnosed connective tissue failures. Diagnosing corrective vs. clinical management scenarios when considering maximum medical improvement in both the chronic and acute, insidious and traumatically induced patient.* **PACE Approved for the Federation of Chiropractic Licensing Board, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2018**

**Cadaver Lab: Anatomy of the Spine and Review of Commonly Co-Managed Orthopedic Conditions**, *Real – time cadaver dissection of the spine to provide anatomy review and discussion of the top conditions which are most commonly co-managed among spinal surgeons, chiropractors, physical therapists and acupuncturists including disc bulges, disc herniations, disc extrusions, disc sequestrations and spondylolisthesis. Topics include pre-and post-surgical chiropractic care and identification of strategies both the chiropractor and orthopedic spine surgeon to achieve optimal outcomes for patients while working together in a multidisciplinary approach.* **Association of New Jersey Chiropractors Fall Summit, New Brunswick, NJ, 2018**

**Spinal Biomechanical Engineering: Cartesian System**, *The Cartesian Coordinate System from the history to the application in the human body. Explanation of the x, y and z axes in both translation and rotations (thetas) and how they are applicable to human biomechanics.* **Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2018**

**Spinal Biomechanical Engineering: Cervical Pathobiomechanics**, *Spinal biomechanical engineering of the cervical and upper thoracic spine. This includes the normal and pathobiomechanical movement of both the anterior and posterior motor units and normal function and relationship of the intrinsic musculature to those motor units. Nomenclature in reporting normal and pathobiomechanical findings of the spine.* **Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2018**

**Spinal Biomechanical Engineering: Lumbar Pathobiomechanics**, *Spinal biomechanical engineering of the lumbar spine. This includes the normal and pathobiomechanical movement of both the anterior and posterior motor units and normal function and relationship of the intrinsic musculature to those motor units. Nomenclature in reporting normal and pathobiomechanical findings of the spine.* **Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2018**

**Spinal Biomechanics in Trauma**, *To utilize whiplash associated disorders in various vectors of impact and whiplash mechanisms in determining pathobiomechanics. To clinically correlate annular tears, disc herniations, fractures, ligament pathology and spinal segmental instability as sequellae to pathobiomechanics from trauma. The utilization of digital motion x-ray in diagnosing normal versus abnormal facet motion along with case studies to understand the clinical application.* **Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2018**

**Spinal Biomechanical Engineering & Organizational Analysis**, *Integrating spinal biomechanics and pathobiomechanics through digitized analysis. The comparison of organized versus disorganized compensation with regional and global compensation. Correlation of the vestibular, occular and proprioceptive neurological integration in the righting reflex as evidenced in imaging. Digital and numerical algorithm in analyzing a spine.* **Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2018**

**Spinal Biomechanical Engineering: Cervical Digital Analysis**, *Digitizing and analyzing the cervical spine in neutral, flexion and extension views to diagnose pathobiomechanics. This includes alteration of motion segment integrity (AMOSI) in both angular and translational movement. Ligament instability/failure/pathology are identified all using numerical values and models. Review of case studies to analyze pathobiomechanics using a computerized/numerical algorithm.* **Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2018**

**Spinal Biomechanical Engineering: Lumbar Digital Analysis**, *Digitizing and analyzing the lumbar spine images to diagnose pathobiomechanics. This includes anterior and posterior vertebral body elements in rotational analysis with neutral, left and right lateral bending in conjunction with gate analysis. Ligament instability/failure/pathology is identified all using numerical values and models. Review of case studies for analysis of pathobiomechanics using a computerized/numerical algorithm along with corrective guidelines.* **Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2018**

**Spinal Biomechanical Engineering: Full Spine Digital Analysis**, *Digitizing and analyzing the full spine images to diagnose pathobiomechanics as sequellae to trauma in relation to ligamentous failure and disc and vertebral pathology as sequellae. This includes anterior and posterior vertebral body elements in rotational analysis with neutral, left and right lateral bending in conjunction with gate analysis. Ligament instability/failure/pathology is identified all using numerical values and models. Review of case studies for analysis of pathobiomechanics using a computerized/numerical algorithm along with corrective guidelines.* **Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2018**

**Interprofessional Hospital Based Spine Care**, *Trends in hospital and emergent care in the healthcare delivery system inclusive of policies, hospital staffing and current care paths for mechanical spine issues.* **Texas Chiropractic College, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2017**

**MRI Spine Interpretation and Spinal Biomechanics**, *Bulging, herniated, protruded and extruded disc contemporary nomenclature, analysis and differential diagnosis. Connective tissue physiology and pathology with aberrant biomechanical permanent sequelae,* **Texas Chiropractic College, Academy of Chiropractic, Melville NY, 2017**

**Contemporary Literature in Spinal Biomechanics**, *Normal vs. pathological biomechanical spinal motion both in a single motor unit and coupling actions. Interdisciplinary approach to mechanical spine issues and evidenced based care paths,* **Texas Chiropractic College, Academy of Chiropractic, Melville NY, 2017**

**Documentation of Spinal Trauma**, *Interdisciplinary approaches in documentation of spinal related injuries inclusive of connective tissue disorders and biomechanical failure. Clinically correlating history, imaging, advanced imaging and clinical findings to conclude an accurate diagnosis, prognosis and treatment plan,* **Texas Chiropractic College, Academy of Chiropractic, Melville NY, 2017**

**Contemporary Literature of the Chiropractic Spinal Adjustment**, *The bio-neuro-mechanical scientific foundation of spinal lesion and the neurological pathways, both in the lower and upper motor neuron pathways. The autonomic sequella of the vertebral subluxation and the effects of the correction and maintenance of those lesions,* **Texas Chiropractic College, Academy of Chiropractic, Melville NY, 2017**

**MRI Interpretation of Degenerative Spine and Disc Disease with Overlapping Traumatic Insult to Both Spine and Disc**, *MRI slices, views, T1, T2, STIR Axial, FFE, FSE and sagittal images in the interpretation of degenerative spondylolisthesis, spinal canal stenosis, Modic type 3 changes, central herniations, extrusions, compressions, nerve root compressions, advanced spurring and thecal sac involvement from an orthopedic, emergency room, chiropractic, neurological, neurosurgical, physical medicine perspective.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Interpretation of Cervical Herniations**, *MRI slices, views, T1, T2, STIR Axial, FFE, FSE and sagittal images in the interpretation of cervical herniations. With the comorbidities and complications of stenosis, pseudo-protrusions, cantilevered vertebrae, Schmorl's nodes and herniations. Morphology of cervical disc pathologies of central and lateral herniations, protrusions, extrusions, sequestration, focal and broad-based herniations are defined and illustrated. Spinal cord and canal compromise interpretation with management.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Interpretation of Cervical Degeneration/Bulges**, *MRI slices, views, T1, T2, STIR axial, stacking, FFE, FSE and sagittal images in the interpretation of cervical degeneration. With the co-morbidities and complications of stenosis, pseudo-protrusions, cantilevered vertebrate, Schmorl's nodes and herniations. Spinal cord and canal compromise interpretation with management.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Interpretation of Lumbar Herniations**, *MRI slices, views, T1, T2, STIR axial, stacking, FFE, FSE and sagittal images in the interpretation of lumbar herniations. With the co-morbidities and complications of stenosis, pseudo-protrusions, cantilevered vertebrate, Schmorl's nodes and herniations. Morphology of lumbar disc pathologies of central and lateral herniations, protrusions, extrusions, sequestration, focal and broad based herniations are defined and illustrated. Central canal and cauda equina compromise interpretation with management.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Interpretation of Lumbar Degeneration/Bulges**, *MRI slices, views, T1, T2, STIR axial, stacking, FFE, FSE and sagittal images in the interpretation of lumbar degeneration. With the co-morbidities and complications of stenosis, pseudo-protrusions, cantilevered vertebrate, Schmorl's nodes and herniations. Central canal and cauda equina compromise interpretation with management.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Protocols Clinical Necessity**, *MRI slices, views, T1, T2, STIR axial, stacking, FFE, FSE and sagittal images. Clinical indication for the utilization of MRI and pathologies of disc in both trauma and non-trauma sequelae, including bulge, herniation, protrusion, extrusion and sequestration.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Clinical Application**, *The clinical application of the results of space occupying lesions. Disc and tumor pathologies and the clinical indications of manual and adjustive therapies in the patient with spinal nerve root and spinal cord insult as sequelae.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Methodology of Analysis**, *MRI interpretation sequencing of the cervical, thoracic and lumbar spine inclusive of T1, T2, STIR and 3D gradient studies to ensure the accurate diagnosis of the region visualized.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Spinal Pathology**, *MRI interpretation of bone, intradural, extradural, cord and neural sleeve lesions. Tuberculosis, drop lesions, metastasis, ependymoma, schwannoma and numerous other spinal related tumors and lesions.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Disc Pathology and Spinal Stenosis**, *MRI interpretation of bulged, herniated, protruded, extruded, sequestered and fragmented disc pathologies in etiology and neurological sequelae in relationship to the spinal cord and spinal nerve roots.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, Board for Chiropractic, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI Spinal Anatomy and Protocols**, *Normal anatomy of axial and sagittal views utilizing T1, T2, 3D gradient and STIR sequences of imaging. Standardized and desired protocols in views and sequencing of MRI examination to create an accurate diagnosis in MRI.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**MRI History and Physics**, *Magnetic fields, T1 and T2 relaxations, nuclear spins, phase encoding, spin echo, T1 and T2 contrast, magnetic properties of metals and the historical perspective of the creation of NMR and MRI.* **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic**, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2014

**Manipulation Under Anesthesia**, *Refresher Symposium*, **Cornerstone Professional Education, Inc.**, co-sponsored by **South California University of Health Sciences**, 36 hour CE certificate of training course; **Saddle Brook, New Jersey, 2014.**

**Electrodiagnosis Certificate Program, Module 5: Motor and Sensory Nerve Conduction Studies of the Lower Extremity Practicum Laboratory**, **New York Chiropractic College Department of Post Graduate and Continuing Education**, **Levittown, New York, 2014**

**Electrodiagnosis Certificate Program, Module 4: Polyneuropathy, Neuropathy and Radiculopathy of the Lower Extremity**, **New York Chiropractic College Department of Post Graduate and Continuing Education**, **Levittown, New York, 2014**

**Electrodiagnosis Certificate Program, Module 3: Motor and Sensory Nerve Conduction Studies of the Upper Extremity Practicum Laboratory**, **New York Chiropractic College Department of Post Graduate and Continuing Education**, **Levittown, New York, 2013**

**Electrodiagnosis Certificate Program, Module 2: Neuropathy and Radiculopathy of the upper Extremity**, **New York Chiropractic College Department of Post Graduate and Continuing Education**, **Levittown, New York, 2013**

**Electrodiagnosis Certificate Program, *Module 1: Introduction to Principles and Practice of Electrodiagnosis*, New York Chiropractic College Department of Post Graduate and Continuing Education, Levittown, New York, 2013**

**Certification in Current Perception Threshold Examination, *Comprehensive Clinician's Training Course in the Procedure and Diagnostic Interpretation of the Current Perception Threshold Examination*. Neurotron Incorporated, Towson, Maryland, May 18, 2012. Certification # 051812-03.**

**Comprehensive MRI Imaging of the Spine: *Everything a Chiropractor Needs to Know*. New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2012**

**Interpreting Spinal Trauma MRI's, *Level 1, Certificate in Diagnostic Imaging*. New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2008**

**Interpreting Spinal Trauma MRI's, *Level 2, Certificate in Diagnostic Imaging*. New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2008**

**Manipulation Under Anesthesia Certification Course, *Manipulation Under Anesthesia certification*, American Academy of Manual and Physical Medicine, Granbury, Texas, 2006**

**Manipulation Under Anesthesia Certification Course, *Operating Room Procedures and MUA Proctorship Requirements*, American Academy of Manual and Physical Medicine, Granbury, Texas, 2006**

**Manipulation Under Anesthesia certification Course, *Pain Management Certification*, American Academy of Manual and Physical Medicine, Granbury, Texas, 2006**

**Current concepts in Concussion Management, *Adopted from the Consensus Statement on Concussion in Sport: The 3<sup>rd</sup> International Conference on Concussion in Sport Held in Zurich, November 2008*. New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2012**

**NYS Workers' Compensation Variance Process, *Beginning December 1, 2010 Guidelines exist for Neck, Back, Shoulder & Knee injuries; they are considered the 'standard of care' for work related injuries. A variance request must be submitted for any care that deviates from the guidelines. Proper documentation for the New York State licensed doctor of chiropractic during a Workers Compensation patient encounter*. New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2011**

**Neurodiagnostics, Imaging Protocols and Pathology of the Trauma Patient, *An in-depth understanding of the protocols in triaging and reporting the clinical findings of the trauma patient. Maintaining ethical relationships with the medical-legal community*. CMCS Post Doctoral Division, New York Chiropractic Council, New York State Department of Education Board for Chiropractic, Long Island, NY, 2011**

**Diagnostics, Risk Factors, Clinical Presentation and Triaging the Trauma Patient, *An extensive understanding of the injured with clinically coordinating the history, physical findings and when to integrate neurodiagnostics. An understanding on how to utilize emergency room records in creating an accurate diagnosis and the significance of “risk factors” in spinal injury.*** CMCS Post Doctoral Division, New York Chiropractic Council, New York State Education Department Board for Chiropractic, Long Island, NY, 2011

**Crash Dynamics and Its Relationship to Causality, *An extensive understanding of the physics involved in the transference of energy from the bullet car to the target car. This includes G's of force, newtons, gravity, energy, skid marks, crumple zones, spring factors, event data recorder and the graphing of the movement of the vehicle before, during and after the crash. Determining the clinical correlation of forces and bodily injury.*** CMCS Post Doctoral Division, New York Chiropractic Council, New York State Education Department Board for Chiropractic, Long Island, NY, 2011

**MRI, Bone Scan and X-Ray Protocols, Physiology and Indications for the Trauma Patient, *MRI interpretation, physiology, history and clinical indications, bone scan interpretation, physiology and clinical indications, x-ray clinical indications for the trauma patient.*** CMCS Post Doctoral Division, New York Chiropractic Council, New York State Education Department Board for Chiropractic, Long Island, NY, 2011

**Neurodiagnostic Testing Protocols, Physiology and Indications for the Trauma Patient, *Electromyography (EMG), Nerve Conduction Velocity (NCV), Somato Sensory Evoked Potential (SSEP), Visual Evoked Potential (VEP), Brain Stem Auditory Evoked Potential (BAER) and Visual-Electronystagmosgraphy (V-ENG) interpretation, protocols and clinical indications for the trauma patient.*** CMCS Post Doctoral Division, New York Chiropractic Council, New York State Education Department, Board for Chiropractic, Long Island, NY, 2010

**Documentation and Reporting for the Trauma Victim, *Understanding the necessity for accurate documentation and diagnosis utilizing the ICD-9 and the CPT to accurately describe the injury through diagnosis. Understanding and utilizing state regulations on reimbursement issues pertaining to healthcare.*** CMCS Post Doctoral Division, New York Chiropractic Council, New York State Education Department, Board for Chiropractic, Long Island, NY, 2011

**Documenting Clinically Correlated Bodily Injury to Causality, *Understanding the necessity for accurate documentation, diagnosis and clinical correlation to the injury when reporting injuries in the medical-legal community. Documenting the kinesio pathology, myopathology, neuropathology, and pathophysiology in both a functional and structural paradigm.*** CMCS Post Doctoral Division, New York Chiropractic Council, New York State Education Department, Board for Chiropractic, Long Island, NY, 2011

**Impairment Rating Certification, *The understanding and utilization of the protocols and parameters of the AMA Guide to the Evaluation of Permanent Impairment 6th Edition. Spine, neurological sequelae, migraine, sexual dysfunction, sleep and arousal disorders, station and gait disorders and consciousness are detailed for impairment rating. Herniated discs, radiculopathy, fracture, dislocations and functional loss are also detailed in relation to impairment ratings.*** CMCS Post Doctoral Education Division, New York Chiropractic Council, New York State Education Department, Long Island, NY, 2011

**Head Trauma, Brain Injury and Concussion**, *Brain and head physiology, brain mapping and pathology as a sequella to trauma. Traumatic brain injury, mild traumatic brain injury, axonal shearing, diffuse axonal injury and concussion are detailed in etiology and clinically. Clinical presentation, advanced diagnostic imaging and electrodiagnostics are detailed in analysis to create a differential diagnosis. Balance disorders that often occur as a result of trauma are also explored from clinical presentation to advanced imaging and differential diagnosis.* **CMCS Post Doctoral Division, New York Chiropractic Council, New York State Department of Education, Board for Chiropractic, Long Island, NY, 2011**

**CPT Coding, Compliance and Documentation**, *evaluation and management coding, chiropractic and rehab coding, diagnosis pointing, establishing and documentation of medical necessity, creating compliant soap notes, understanding insurance explanation of benefits, Medicare, common coding and billing “ red flags”.* **New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2011**

**Medicare Documentation and Guidelines Part 1**, *Development of the Medicare program, Chiropractic inclusion, Medicare restrictions in Chiropractic practice, patient coverage, Participating vs. Non-participating providers, Chiropractic practice standards and guidelines for Medicare billing. Critical issues regarding the Center for Medicare/Medicaid Services’ (CMS) concerns regarding deficiencies in chiropractic claims reporting. HIPAA, NPI and P.A.R.T. standards for billing, procedure code modifiers, physical examination requirements, medical necessity, informed consent, fraudulent billing, local policy determination, and misconceptions in Medicare policy.* **New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2011**

**Interpreting Spinal Trauma with MRI’s**, *Physics of MRI, osteology, MRI interpretation, MRI of bone marrow and vertebral endplates, MRI of disc disease and spinal kinetics.* **New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2008**

**Interpreting Spinal Trauma MRI’s**, *Level 1 Practical work session and case studies with Steven Brownstein M.D.* **New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2008**

**Interpreting Spinal Trauma MRI’s**. *Level 2 Practical work session and case studies with Steven Brownstein, M.D.* **New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2008**

**Infection Control Certification for New York State Licensure**, *An introduction to the basic principles of infection control as they pertain to ambulatory surgical settings and foster the development of effective infection control policies and procedures in the ambulatory surgical setting.* **Certification # CRT-1035526, 2008**

**Management and Rehabilitation of Whiplash Injuries**, *Factors in the development of an appropriate management strategy for acute soft tissue injuries of the cervical spine, understanding the functions of the cervical spine, understanding the healing process and establishing treatment goals, making an accurate identification of the injured/dysfunctional structures, appropriate application of a therapeutic regimen.* **New York Chiropractic College, Department of Post Graduate and Continuing Education, Levittown, New York, 2004**

**Science Based Nutrition 1**, *Protocols for identifying serious diseases, determining metabolic imbalances and establishing nutritional recommendations by using comprehensive blood tests, hair analysis, urinalysis, and other objective testing and documenting patient progress through retesting. Nutritional recommendations for diabetes, heart disease, kidney function, liver disease, gall bladder disease, warning signs (metabolic and disease indicators) using actual cases.* **Texas Chiropractic College, Columbus, Ohio, 2004**

**Whiplash and Brain Injury Traumatology, Module 2, Advanced Diagnostics, Treatment, and Auto Crash Reconstruction**, *History taking and physical examination skills. Radiographic and advanced imaging, including CT, MRI, scintigraphy, PET, SPECT, and others. Electrodiagnostic testing and their applications in whiplash. Healing of soft tissue injuries and designing a rational treatment program, including activities of daily living advice and ancillary procedures. Therapeutic approaches to successful management of whiplash. Maximum medical improvement.* **Spine Research Institute of San Diego, Southern California University of Health Sciences, Newark, New Jersey, 2002**

**Chiropractic Biophysics: Level 4**, Upper Cervical Anomalies, Nasium Line Drawing, Postural Stressing and Cervical-Thoracic-Pelvic mirror image set-ups Using the Harrison Upper Cervical Instrument, **Newark, New Jersey, 1995**

## **SURGICAL CENTER PRIVILEGES**

### **SELECTED PRESENTATIONS**

“Exercise and Diabetes”: The dramatic effect exercise has on blood glucose levels. Presented to seventh trimester students of Ancillary Therapeutic Techniques II at New York Chiropractic College.

“Otitis Media in Children”: Some facts, misconceptions and benefits of chiropractic care. Presented to eighth trimester students of Clinical Correlation Conference at New York Chiropractic College.

### **SELECTED MEMBERSHIPS**

American Chiropractic Association (ACA), Member, 1998 - Present

Association of New Jersey Chiropractors (ANJC), Member, 2006-Present

Association of New Jersey Chiropractors (ANJC), Insurance Committee, 2009-Present

Association of New Jersey Chiropractors (ANJC), Chiropractic State Board Member, 9-2020-Present

Nutrition Education Council (NEC), Member, 2012-Present

## **SELECTED AWARDS**

Association of New Jersey Chiropractors (ANJC) Special services award. Outstanding effort and commitment to the association. 2015

(201) Magazine Bergen's Top Chiropractor. 2015, 2016, 2017, 2018 and 2019.

## **SELECTED COMMUNITY SERVICE**

St. John's Academy Assistant Boys Basketball Coach 2013, 2014, 2015

Emerson Baseball Recreation League Assistant Coach 2013, 2014, 2015, 2016.

Emerson Softball Recreation League Assistant Coach 2014.

"Healing Hands 4 Heroes" Army OneSource Program to benefit returning veterans, A U.S. Army community outreach program designed to raise awareness of the unique challenges that military life has on our service members and their families, as well as, to address the growing need for accessible health services. 2011.