

SELECTED OCCUPATIONAL HISTORY

Owner/Staff Chiropractor, Meylor Chiropractic & Acupuncture, Lenexa, Kansas, 2005 - Present

Staff Chiropractor, Kansas City Medicine Partner, Lenexa, Kansas, 2016 - 2017

Staff Chiropractor, Meylor Chiropractic Offices, Sioux City, IA, 2004 - 2005

Volunteer Chiropractic Work, Palmer Clinic Abroad Program, Brazil, 2004

EDUCATION AND LICENSURE

Doctor of Chiropractic, Licensed in the State of Kansas, License # 01-05509, 2005 - Present

Doctor of Chiropractic, Licensed in the State of Missouri, License # 2011003871, 2011 - 2012

Doctor of Chiropractic, Licensed in the State of Iowa, License # 06795, 2005 - 2007

Doctor of Chiropractic, Licensed in the State of North Carolina, License # 2011003871, 2005 - 2007

Doctorate of Chiropractic, Palmer College of Chiropractic, Davenport, IA, 2004

National Board of Chiropractic Examiners, Part IV, 2005

National Board of Chiropractic Examiners, Part III, 2005

National Board of Chiropractic Examiners, Part II, 2005

National Board of Chiropractic Examiners, Part I, 2005

National Board of Chiropractic Examiners, Physiotherapy, 2004

Bachelors of Science, Excelsior College, Albany, NY, 2004

CERTIFICATIONS, QUALIFICATIONS AND DIPLOMATES

Trauma Team Qualified, Academy of Chiropractic, 2018 - Present

SELECTED POST-GRADUATE EDUCATION

Spine Management Clinical Workflows - *in-depth review and discussion of the Doctor of Chiropractic as a Spine Management Physician with specific focus on*

the diagnosis and management of spine pain of mechanical origin. Details were outlined in relation to triage of anatomical causes of spine pain such as fracture, tumor, infection. National Spine Management Group, Cleveland University Kansas City, Chiropractic and Health Sciences, Federation of Chiropractic Licensing Boards, Buffalo, NY, Lehi, UT 2021.

Pain Management and the Chiropractic Adjustment - Current peer reviewed indexed research demonstrating the chiropractic adjustment's effect on the central nervous system and pain threshold was outlined and reviewed. Anatomical review and contemporary supportive research were discussed. Details of central nervous system response to the chiropractic adjustment was reviewed and demonstrated. National Spine Management Group, Cleveland University Kansas City, Chiropractic and Health Sciences, Federation of Chiropractic Licensing Boards, Buffalo, NY, Lehi, UT 2021.

Corrective Spinal Care and Chiropractic Case Management - Current peer reviewed indexed research demonstrating the chiropractic adjustment's effect on the biomechanical structure of the human spine during the corrective/rehabilitative phase of care. Basic outline of biomechanical parameters in symptomatic and asymptomatic patients was reviewed with particular focus on pathobiomechanics in chiropractic practice. National Spine Management Group, Cleveland University Kansas City, Chiropractic and Health Sciences, Federation of Chiropractic Licensing Boards, Buffalo, NY, Lehi, UT 2021.

Health Maintenance Care and Chiropractic Case Management - Current peer reviewed indexed research demonstrating the chiropractic adjustment's effect on the maintenance of the human spine. Details of indexed research reviewing Chiropractic's role in the reduction of narcotic utilization and decreased absenteeism from work due to disability. Communicating Health Maintenance Care to the medical profession and the public was emphasized. National Spine Management Group, Cleveland University Kansas City, Chiropractic and Health Sciences, Federation of Chiropractic Licensing Boards, Buffalo, NY, Lehi, UT 2021.

Evidence Based Clinical Reporting - overview of current CPT and ICD-10 coding guidelines pertaining to the evaluation and management of spine pain patients was presented. Timed codes, relevant diagnosis related to injured tissue was presented. Specific discussion of proper format of the Assessment portion of clinical documentation was presented. Review of the difference between daily

progress notes and Evaluation and Management [E/M] reporting was provided. National Spine Management Group, Cleveland University Kansas City, Chiropractic and Health Sciences, Federation of Chiropractic Licensing Boards, Buffalo, NY, Lehi, UT 2021.

Cervical Spine Clinical Workflows - detailed review of workflows of a thorough patient history and identification of clinical red flags related to relative and absolute contraindications to chiropractic care was presented. Outline of neurological examination including pathological reflexes present during spinal cord compression, cervical stenosis and cervical myelomalacia was discussed. Normal vs abnormal measurement of range of motion objectifying spinal dysfunction was presented. Specific orthopedic testing related to specific muscle, nerve or intervertebral disc injury was discussed. Review of interprofessional triage and imaging decision tree was outlined with specific focus on the pain management physician and spinal surgeon. National Spine Management Group, Cleveland University Kansas City, Chiropractic and Health Sciences, Federation of Chiropractic Licensing Boards, Buffalo, NY, Lehi, UT 2021.

Supporting improvement of Patient Care; Understanding the collaboration and co-management of musculoskeletal complaints for better patient outcome. Pain management procedures and current treatment, along with case studies and research on treatment outcomes with certain conditions. When and how to have utilization of Chiropractic care and Physical therapy care for patient in conjunction or instead of medication or drug therapy. Proper communication and time frames of care for different providers within the medical community. Duke health; Duke University systems, Department of Clinical Education and Professional Development, accredited by American Nurses Credentialing Center (ANCC), the Accreditation Council for Pharmacy Education (ACPE), and the Accreditation Council for Continuing Medical Education (ACCME) Durham, NC, 2020

Trends in Spinal Healthcare, Analyzing spinal healthcare trends in both utilization and necessity and understanding the marketplace and how a level of clinical excellence is reflected in a doctors' documentation and credentials. Treatment pathways in triage and spinal pathobiomechanics. Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island, NY 2020

MRI Spine Interpretation, An evidence-based understanding of time-related etiology of disc pathology considering the American Society of Neuroradiology's

designation of protrusion, extrusion, and sequestration of spinal discs, Considering the signal intensity of discs in age-dating pathology and acquisition protocols for advanced spinal imaging. Academy of Chiropractic Post-Doctoral Division, Cleveland University - Kansas City, Long Island, NY, 2020

Spinal Biomechanics; A Literature Perspective, An evidenced-based model for spinal biomechanical engineering and pathobiomechanics considering the pathophysiological limits in translations, angular deviation, and rotational planes. Utilizing the Cartesian system in plotting vertebral points to demonstratively conclude an accurate diagnosis, prognosis and biomechanical treatment plan with the consideration of long-term care in the non-specific mechanical spine pain patient when necessary. Academy of Chiropractic Post-Doctoral Division, Cleveland University - Kansas City, Long Island, NY 2020

Case Management of Mechanical Spine Pathology, Clinical Grand Rounds of herniated, protruded, extruded, sequestered, and bulging discs. Differentially diagnosing vascular vs. mechanical spine lesions and the necessity for urgent vascular, neurological intervention, Collaboration in a team environment utilizing a neuroradiologist, electrophysiologist, and neurosurgeon with the chiropractor as the primary spine care provider. Academy of Chiropractic Post-Doctoral Division, Cleveland University - Kansas City, Long Island, NY, 2020

Trends in Spinal Treatment, Management 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 spinal biomechanics and the neurotransmitters required for homeostasis. The interconnected role of Pacinian Corpuscles, Ruffini Corpuscles, Golgi Organ Receptors, Nociceptors, Proprioceptors and Mechanoreceptors 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 patterns

with advanced imaging findings of bone edema, and bone spurs based upon the Piezoelectric effect for remodeling, high signal on T2 weighted images, Vacuum Discs and disc heights in determining the time frames of the etiology of 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 be 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 Biomechanical Engineering, Understanding the lateral and ventral horn's innervations of Pacinian Corpuscles, Ruffini Corpuscles, Golgi Organ Receptors, Nociceptors, Proprioceptors and Mechanoreceptors, and the pathways through the spinal thalamic tracts through the periaqueductal region, the Thalamus into the Occipital, pre-frontal, sensory and motor cortexes and then efferently back through the Thalamus to disparate regions in creating spinal homeostasis. 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 in 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

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 until 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 1st 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 Duabert 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

Documentation of the Trauma and Non-Trauma Case, *Documenting primary and associated complaints, past history, allergies, medications, review of systems, previous treatment, family-social medical histories, previous tests and results, history or previous injuries and illnesses, on the job questionnaire, auto accident questionnaire, vital examination, neurological examination, orthopedic testing, test orders, prognosis and treatment plans. A detailed review of current CPT coding requirements for the proper documentation of E/M visits to properly code for billable patient services. Focused attention was paid to the performance of*

comprehensive patient history, physical examination, review of systems as well as determining the level of clinical decision making. Analysis of a properly organized E/M report was reviewed to demonstrate proper organization and language use. PACE Approved for the Federation of Chiropractic Licensing Board, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2018

Interprofessional Reporting and Case Documentation, analysis of case flow, patient chart organization and EMR workflows to optimize the success and satisfaction of the patient encounter, feasibility of accurate and timely documentation as well as strategies to provide timely interprofessional clinical communication. Focus was provided on patient, primary care and medical specialty communication beginning at the initial visitation all the way through to the release from care. An internal compliance review to ensure complete documentation based upon the E/M level billed. PACE Approved for the Federation of Chiropractic Licensing Board, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2018

Documenting Trauma and Non-Trauma Cases & Triaging Disc Pathology, Triage, care and collaboration for herniated, bulged, protruded, extruded and fragmented spinal discs. Compliant documentation of evaluation and management of new and established patients inclusive of chief complaint, history of present illness, review of systems, past-family-social histories with case management protocols and the required elements. Clinically coordinating treatment with subjective complaints, clinical findings and diagnosis for each encounter. PACE Approved for the Federation of Chiropractic Licensing Boards, Academy of Chiropractic Post-Doctoral Division, Long Island, NY 2018

Triage and Management of the Trauma and Non-Trauma Patient, Differentially diagnosing spinal issues in the trauma and non-trauma patient inclusive of spinal disc pathology utilizing x-ray, MRI, CAT Scan and clinical evaluations. Collaborative triaging protocols with neurologists, neurosurgeons, orthopedic surgeons, pain management and primary medical care providers with both mechanical and anatomical spinal pathologies. Academy of Chiropractic, Cleveland University - Kansas City Chiropractic and Health Sciences, Long Island, NY, 2018

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, 2018

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, 2018

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, 2018

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, 2018

Mild Traumatic Brain Injury/Traumatic Brain Injury/Concussion, *Differentially diagnosing mild traumatic brain injuryvs. traumatic brain injury and theclinical and imaging protocols required to conclude an accurate diagnosis forhead trauma.* Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division,Long Island, NY, 2018

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, 2018

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, 2018

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, 2018

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, 2018

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, 2018

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, 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.* 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, 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.* 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, 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.* 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, 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 sequelae 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. 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, 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, ocular and proprioceptive neurological integration in the righting reflex as evidenced in imaging. Digital and numerical algorithm in analyzing a spine.* 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, 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.* 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, 2018

Spinal Biomechanical Engineering: Lumbar Digital Analysis, *Digitalizing 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.* 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, 2018

Spinal Biomechanical Engineering: Full Spine Digital Analysis, *Digitalizing and analyzing the full spine images to diagnose pathobiomechanics as sequelae to*

trauma in relation to ligamentous failure and disc and vertebral pathology as sequelae. 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. 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, 2018

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, 2018

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 Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2018

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, 2018

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, 2018

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, 2018

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, 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.* Cleveland University - Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2018

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, 2018

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, 2018

Orthopedic Testing: Cervical Spine Part 2, *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, 2018

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, 2018

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, 2018

Croft Module 1: Whiplash Advanced Topics: The Fundamental Science, *Requisite and comprehensive biomechanics knowledge for forensic experts, the minimal property damage myth exposed. A cutting edge analysis of brain, neck,*

and other soft tissue injuries that occur secondary to cervical acceleration deceleration syndrome and whiplash associated disorder. Risk assessment: the fundamental key to modern forensic practice. Certification in Whiplash and Brain Injury Traumatology, Spine Research Institute of San Diego, Omaha, NE, 2018

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.* Texas Chiropractic College, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2017

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.* Texas Chiropractic College, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2017

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.* Texas Chiropractic College, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2017

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.* Texas Chiropractic College, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2017

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.* Texas Chiropractic College, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2017

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.* Texas Chiropractic College, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2017

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.* 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 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.* 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, 2017

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.* 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, 2017

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.* 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, 2017

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.* 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, 2017

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.* 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, 2017

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.* 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, 2017

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.* 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, 2017

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 vertebrae, Schmorl's nodes and herniations. Central canal and cauda equina compromise interpretation with management.* 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, 2017

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 vertebrae, 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.* 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, 2017

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 vertebrae, Schmorl's nodes and herniations. Spinal cord and canal compromise interpretation with management.* 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, 2017

MRI Interpretation of Cervical Herniations, *MRI slices, views, T1, T2, STIR Axial, 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. Spinal cord and canal compromise interpretation with management.* 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, 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 spondylolesthesis, 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.* 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, 2017

Nutrition for the Brain, *How nutrition of lack of, cause have direct cause to many ailments and diseases plaguing humans. Testing of blood levels and saliva can give indicative markers to malnutrients and allow physicians to monitor range more accurately. The biggest vitamins and supplements making on our patients lives are Omega3's, probiotics and certain vitamins like d3 and the b vitamins.* Kansas Chiropractic Association, Shawnee, KS, 2017

Primary Spine Care Symposium - *Interprofessional Spine Care, Clinical analysis of anatomic versus biomechanical spine pain and clinical triage protocols. Relating current research trends in the Whole Spine Model of patient including normal versus abnormal sagittal curvature in the adolescent and adult spine, pelvic incidence as a parameter for sagittal balance in the human spine and current methods of assessment. Patient centered approach to Evidenced Based Spine care with a focus on diagnosis, prognosis and triage of the spine pain patient,* Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville NY 2017

Primary Spine Care Symposium - *Epidemiology of Spine Pain, Review of the current Centers for Disease Control [CDC] data on the frequency of musculoskeletal pain in the United States population with emphasis on pain of spinal origin. CDC guidelines on opioid medication were discussed and correlated to persistent pain syndromes. Research was reviewed showing the importance of managing the spine pain patient properly from the entry point of care with a concentration on maintenance of spinal biomechanics*, Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville NY 2017

Primary Spine Care Symposium- *Connective Tissue and Spinal Disc Pathology, The morphology and pathology of connective tissue, inclusive of spinal disc disorders and prognosticating wound repair with permanency implications. Disc bulge, herniation, protrusion and extrusion classifications based upon contemporary literature and how to age-date disc pathology*, Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville NY 2017

Primary Spine Care Symposium - *Physiology and Anatomy of Spinal Manual Adjusting, Understanding the role of mechanoreceptors, proprioceptors and nociceptors with facets, ligaments, tendons and muscles in aberrant spinal biomechanics. MRI and imaging studies of decompressing via a chiropractic spinal adjustment of the bio-neuro-mechanical lesion and its effects on the central nervous system both reflexively and supratentorially*, Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville NY 2017

Primary Spine Care Symposium - *Medical-Legal Documentation, The contemporary documentation required in a medical-legal environment that is evidenced based and meets the standards of the courts and academia. Utilizing the scientific data to support a diagnosis, prognosis and treatment plan while meeting the admissibility standards based upon a professional's credentials*. Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville NY 2017

Connective Tissue Pathology and Trauma, Wound repair of axial connective tissue and the negative spinal biomechanical engineering sequella. Determining causality from an accident reconstruction perspective inclusive of transference of

forces and G's of energy realized by automobile occupants. Texas Chiropractic College, Academy of Chiropractic, Melville NY, 2016

Primary Spine Care, MRI, Bone Edema and Degeneration, The effects of trauma on spinal vertebral segments and the short and long term sequella to morphology. Identifying and diagnosing bone edema, spurring, types of degeneration in assessing biomechanical stability in conjunction with Modic and Pfeiffer changes. Texas Chiropractic College, Academy of Chiropractic, Melville, NY 2016

Chiropractic Wellness Lifestyle Certification Program Module 4, Think Well: The Science, Paradigm, and Clinical Application of Wellness Emotional, Intellectual, and Spiritual Fitness Protocols. ICA Council On Wellness Lifestyle Science, Chicago, IL, 2016

Understanding neurophysiological ramifications of emotional and physical stress, Adaptive physiology in the context of the multiple structural and physiological elements of subluxation complex. Identifying interactions of somato- and psycho-neuroimmunology and neurophysiology in health and illness. Reviewing scientific literature highlighting health promotion and illness prevention benefits of positive mental attitude and congruent belief systems. Outlining optimal approaches and proactive applications for implementing human behavior change through transforming attitude and actions toward wellness-congruent lifestyle changes in patient case management. Speaker Dr. James Chestnut, Chicago, IL, 2016

The Role of the Cervical Spine in Post-Concussion Syndrome, Based on previously established tissue injury thresholds, acceleration/deceleration of the head-neck complex of sufficient magnitude to cause mild TBI is also likely to cause concurrent injury to the joints and soft tissues of the cervical spine. It has also been well established that injury and/or dysfunction of the cervical spine can result in numerous signs and symptoms synonymous with concussion, including head-aches, dizziness, as well as cognitive and visual dysfunction; making diagnosis difficult. Speaker Dr. Steve Gould DC, DACBR, FICC Overland Park, KS, 2016

Primary Spine Care, Neurophysiological central and peripheral nervous systems mechanisms of pain with integrated higher cortical functions of the thalamus, cingulate, amygdala, pre-frontal, motor and sensory cortexes. Trauma and chronic pain care effecting mechanoreceptors, nociceptors and proprioceptors through adjustive therapy based upon evidenced based care and current

literature verification. Texas Chiropractic College, New York State Department of Education Board for Chiropractic, Academy of Chiropractic, Islandia, NY, 2015

Primary Spine Care with Interdisciplinary Collaborative Care, *Triage of patients based upon MRI findings of disc herniation, disc bulge, protrusion, extrusion or sequestrations and spinal cord or nerve root negative sequella, clinical findings of neuro-compressive pathologies and neurodiagnostic findings of EMG-NCV, SSEP, VEP, BAER, VEP and V-ENG findings.* Texas Chiropractic College, New York State Department of Education Board for chiropractic, Academy of Chiropractic, Islandia, NY, 2015

Certified Chiropractic Wellness Lifestyle Practitioner Program: Module 1, *This course puts together the science, paradigm and clinical application of Chiropractic- The relationship between chiropractic, movement, neuromusculoskeletal system function, autonomic function, allostasis and health. This course used the proof of evidenced based research to teach on how Chiropractic plays a vital role in the overall outcome of health for the general public.* Cleveland Chiropractic College, Overland Park, KS, 2015

Impairment rating AMA guidelines 6th edition, *"Guidelines to the Evaluation of Permanent Impairment" - 6th Edition, including the new ICD-10 codes. learning impairment vs. disability, new rules, diagnosis based impairments, specific disorders of the spine, upper and lower extremity impairment, and documentation for impairment.* Iowa Chiropractic Association, Des Moines, IA, 2014

National Registry of Certified Medical Examiners Training, *This included studies on vision, FMCSA regulations for vision: visual acuity, peripheral horizontal vision fields, color recognition, pupil accommodation, monocular vision, federal vision exemptions. Hearing: FMCSA regulations for hearing: Meniere's Disease, Vertigo, Labyrinthine Fistula, Nonfunctioning Labyrinth, Audiometric Test, Force whisper test. Cardiovascular Disease: FMCSA regulations for Cardiovascular Disease: Coronary Heart Disease, Myocardial Disease, Post Heart Transplant, Valvular Heart Disease, Congenital Heart Disease, Cardiac Arrhythmias and Treatments, Aneurysms, Peripheral Vascular Disease, and Venous Disease and Treatment. Hypertension: FMCSA regulations for Hypertension. Diabetes Mellitus: FMCSA regulations for Diabetes Mellitus, Incretin Mimetic, Insulin Therapy, Oral Hypoglycemic. Respiratory System: FMCSA regulation for Respiratory System: Asthma and Allergy related Disease, Chronic Obstructive Pulmonary Disease, Chronic Sleep Disorders, Infectious Respiratory Diseases, Non-Infectious*

Diseases. Neurological Conditions: FMCSA regulation for Neurological Conditions: Episodic Neurological Conditions, Neuromuscular Diseases, Progressive Neurological Conditions, Static Neurological Conditions. Musculoskeletal: FMCSA regulation for Musculoskeletal Conditions: Neuromuscular Diseases, Skilled Performance Tests. Other: Urinalysis, Psychological Disorders Drug and Alcohol Testing. Accreditation Council for Continuing Medical Education (ACCME), Lenexa, KS, 2014

Croft Module 1: Whiplash Advanced Topics: The Fundamental Science, *Requisite and comprehensive biomechanics knowledge for forensic experts, the minimal property damage myth exposed. A cutting edge analysis of brain, neck, and other soft tissue injuries that occur secondary to cervical acceleration deceleration syndrome and whiplash associated disorder. Risk assessment: the fundamental key to modern forensic practice.* Certification in Whiplash and Brain Injury Traumatology, Spine Research Institute of San Diego, Kansas City, MO, 2013

Croft Module 2: Management Principles in Personal Injury and Forensic Documentation, *Auto crash reconstruction in low speed crashes: critical knowledge for today's forensic practitioners. Comprehensive physical examination of whiplash and traumatic brain injury cases and the correct way to document these injuries. The latest radiographic examination methods and analysis techniques. CT and MRI examination of brain and soft tissue injuries. How and when to use special diagnostic imaging modalities (SPECT, PET, functional MRI, VF, etc.) How and when to use electrodiagnostics (EMG, sEMG, SSEP, VEP, etc.) Special considerations for the proper management of personal injury cases.* Certification in Whiplash and Brain Injury Traumatology, Spine Research Institute of San Diego, Kansas City, MO, 2013

Croft Module 3: Principles of Impairment Rating and Forensic, *Reporting Critical documentation from day 1; What every personal injury and forensic expert needs to know. Incorporating outcomes assessment and disability instruments into your reports (SCL-90-R, Oswestry, Roland-Morris, Rivermead PCS, and more). The application of AMA guidelines in personal injury and forensic practice. Critical rebuttal methods and strategies in today's modern forensic practice.* Certification in Whiplash and Brain Traumatology, Spine Research Institute of San Diego, Kansas City, MO, 2013

Croft Module 4: Medicolegal Fundamentals for Practitioners and Forensic Experts, *Essentials of documentation and record keeping in medicolegal cases. When and how to incorporate medical photography. Preparing for depositions arbitrations, cross-examination and testifying in court. Critical differences between chiropractic and medical approaches that make or break a case. Using evidence effectively; models, charts, diagrams, photos, movies, and more. Daubert and Frey rules; how they affect your testimony and how they can exclude opposing experts. Disabusing the MIST myth; Colossus. Learned treatises and reliable authorities; other federal rules of evidence experts should know.* Certification in Whiplash and Brain Traumatology, Spine Research Institute of San Diego, Kansas City, MO, 2013

Titleist Performance Institute: Golf Fitness Instructor, *Instruction was taught on the evaluation and management of Golf Biomechanics to improve movements, strengthen engaging muscles, stretch appropriate muscle groups, reduce injury and rehab injured areas. We learned how to analyze and break down each component of the golf swing to find out where the malfunction(s) occur so to find out if it is a flexibility issue or stability issue.* Parker College of Chiropractic, Dallas, TX, 2009

Croft Module 1: Whiplash Advanced Topics: The Fundamental Science, *Requisite and comprehensive biomechanics knowledge for forensic experts, the minimal property damage myth exposed. A cutting edge analysis of brain, neck, and other soft tissue injuries that occur secondary to cervical acceleration deceleration syndrome and whiplash associated disorder. Risk assessment: the fundamental key to modern forensic practice.* Certification in Whiplash and Brain Injury Traumatology, Spine Research Institute of San Diego, Chicago, IL, 2008

Croft Module 2: Management Principles in Personal Injury and Forensic Documentation, *Auto crash reconstruction in low speed crashes: critical knowledge for today's forensic practitioners. Comprehensive physical examination of whiplash and traumatic brain injury cases and the correct way to document these injuries. The latest radiographic examination methods and analysis techniques. CT and MRI examination of brain and soft tissue injuries. How and when to use special diagnostic imaging modalities (SPECT, PET, functional MRI, VF, etc.) How and when to use electrodiagnostics (EMG, sEMG, SSEP, VEP, etc.) Special considerations for the proper management of personal injury cases.* Certification in Whiplash and Brain Injury Traumatology, Spine Research Institute of San Diego, Chicago, IL, 2008

Croft Module 3: Principles of Impairment Rating and Forensic, *Reporting Critical documentation from day 1; What every personal injury and forensic expert needs to know. Incorporating outcomes assessment and disability instruments into your reports (SCL-90-R, Oswestry, Roland-Morris, Rivermead PCS, and more). The application of AMA guidelines in personal injury and forensic practice. Critical rebuttal methods and strategies in today's modern forensic practice.* Certification in Whiplash and Brain Traumatology, Spine Research Institute of San Diego; Chicago, IL, 2008

Croft Module 4: Medicolegal Fundamentals for Practitioners and Forensic Experts, *Essentials of documentation and record keeping in medicolegal cases. When and how to incorporate medical photography. Preparing for depositions arbitrations, cross-examination and testifying in court. Critical differences between chiropractic and medical approaches that make or break a case. Using evidence effectively; models, charts, diagrams, photos, movies, and more. Daubert and Frey rules; how they affect your testimony and how they can exclude opposing experts. Disabusing the MIST myth; Colossus. Learned treatises and reliable authorities; other federal rules of evidence experts should know.* Certification in Whiplash and Brain Traumatology, Spine Research Institute of San Diego, Chicago, IL, 2008

SELECTED JOURNAL PUBLICATIONS

Croft AC., Milam B., Meylor J., Manning R., (2016) Confirmatory factor analysis and multiple linear regression of the neck disability index: assessment if subscales are equally relevant in whiplash and nonspecific neck pain. *J Chiropractic Medicine* 15(2) pgs. 87-94

SELECTED HONORS & AWARDS

Pinnacle Aware, Top twenty-five Outstanding Doctors of America, Pinnacle Management Group, 2017, 2018, 2019, 2020.

"10 Best" "Patient Satisfaction Award" American Institute of Chiropractors, 2016, 2021

SELECTED MEMBERSHIPS

Academy of Chiropractic, Member, 2014 - Present

Kansas Chiropractic Association (KCA), Member, 2005 - Present

Member of Fellowship of American Society of Acupuncture (F.A.S.A.), Member,
2004 - Present

American Chiropractic Association (ACA), Member, Expired