

Lawrence J. Lefcort, DC
213-15 33rd Road, Bayside, New York, 11361

Phone: 718-428-9851

Fax: 201-794-8818

Llsj13@aol.com

www.physicaltherapyqueensny.com

SELECTED OCCUPATIONAL HISTORY

Clinic Director, Chiropractor, Lefcort MUA Chiropractic, P.C., Bayside, New York, 2011 - Present

Clinic Director, Chiropractor, Bayside Physical Therapy, Chiropractic and Acupuncture PLLC., Bayside, New York, 2009 – Present

Clinic Director, Chiropractor, Bay Terrace Chiropractic, P.C., Bayside, New York, 1995 – Present

Clinic Director, Chiropractor, Dr. Lawrence J. Lefcort, Bayside, New York, 1981 - 1995

EDUCATION AND LICENSURE

Doctor of Chiropractic, Licensed in the State of New York, License # X2565, 1980 – Present

National Board of Chiropractic Examiners, Part 1, 1980

Doctorate of Chiropractic, New York College of Chiropractic, Old Brookville, New York, 1980

Undergraduate Studies of Chiropractic Pre-Requisites, University of Maryland, College Park, Maryland, 1973 - 1976

CERTIFICATIONS AND DIPLOMATES

Academy of Chiropractic – Active Trauma Team Member, 2018 – Present

Certification in Insurance Consultation, New York State Chiropractic Association, Uncasville, CT, 2003

Certification in Chiropractic Rehabilitation Level One, American Chiropractic Rehabilitation Board, Bergen, NJ, 2003

Certification in Independent Forensic Chiropractic Medical Examination, National University of Health Sciences, Mount Pleasant, SC, 2002

Certification in Workers Compensation, State of New York Workers Compensation Board, New York, NY, 1984

SELECTED POST-GRADUATE EDUCATION

Pars Fracture

Diagnosis of Fracture of Pars Interarticularis – *presentation and discussion of the clinical diagnosis of fracture of the pars interarticular, detailed review of patient history, presenting symptomology, physical examination and imaging review. Detailed analysis of radiographic evaluation using dynamic radiographs and advanced imaging of the lumbar spine. Differential diagnosis of pain patterns and neurological findings were presented and clinically correlated to anatomical findings.* State University of New York at Buffalo, Jacobs School of Medicine, Buffalo NY 2020

Interprofessional Communication in Fracture of Pars Interarticularis – *analysis and discussion of the interprofessional communication and triage of pars interarticularis fracture. Documentation processes and referral to medical specialty was reviewed with detailed analysis of communicating spinal biomechanical pathology in conjunction with anatomical findings. Co-management processes was reviewed and discussed. Clinical correlation to case documentation was presented.* State University of New York at Buffalo, Jacobs School of Medicine, Buffalo NY 2020

Clinical Case Management of Fracture of Pars Interarticularis – *clinical case management including both anatomical and mechanical featured of fracture of pars interarticularis was presented and discussed. Surgical parameters were demonstrated and clinically correlated to physical examination and imaging findings. Roles of surgeon, pain management, chiropractic and physical therapy were reviewed and presented. Group consensus on the proper pre-surgical, surgical and post-surgical of the patient were presented. Timeline on recovery and relevant future assessment was reviewed and its clinical correlation to both the acute and chronic pars interarticularis fracture.* State University of New York at Buffalo, Jacobs School of Medicine, Buffalo NY 2020

Cervical Radiculopathy

Diagnosis of Cervical Radiculopathy – *diagnosis of cervical acute and chronic cervical radiculopathy was reviewed and discussed. Emphasis on patient history, symptoms, physical examination and clinical correlation to imaging and electrodiagnostic testing was presented. Clinical correlation to electrodiagnostic findings, advanced imaging and neurological examination was reviewed. Details regarding traumatic vs degenerative cervical radiculopathy etiology was presented as well as the difference between radiculopathy and radiculitis was discussed.* State University of New York at Buffalo, Jacobs School of Medicine, Buffalo NY 2020

Interprofessional Management of Cervical Radiculopathy – *review of interprofessional management of the cervical radiculopathy patient. Considerations for triage and referral were correlated to physical examination findings, severity of the complaint and findings on electrodiagnostic testing. Interventional pain management including epidural injections was outlined. Biomechanical analysis and chiropractic management was reviewed including short and long term management of the cervical radiculopathy patient.* State University of New York at Buffalo, Jacobs School of Medicine, Buffalo NY 2020

Clinical Case Management of Cervical Radiculopathy – evidence based interventions related to cervical radiculopathy were outlined including surgical intervention, interventional pain management, chiropractic and supervised rehabilitation. Acute, subacute and chronic stages of clinical intervention and case management were reviewed and presented. Functional assessment and activity modification were presented and correlated to clinical findings and stage of the diagnosis. State University of New York at Buffalo, Jacobs School of Medicine, Buffalo NY 2020

Extremity MRI & Xray Interpretation of the Shoulder, *Identifying normal anatomy on both MRI and x-ray, inclusive of osseous, connective tissue, and neurological structures. Identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic etiologies of osseous derangement.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Shoulder, *Identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic changes vs. benign and metastatic Tumors.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Elbow, *Identifying normal anatomy on both MRI and x-ray, inclusive of osseous, connective tissue, and neurological structures, identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic etiologies of osseous derangement. Differentially diagnosing various arthritic changes vs. benign and metastatic Tumors.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Wrist, *identifying normal anatomy on both MRI and x-ray, inclusive of osseous, connective tissue, and neurological structures, identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic etiologies of osseous derangement. Differentially diagnosing various arthritic changes vs. benign and metastatic Tumors.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Hand, *identifying normal anatomy on both MRI and x-ray, inclusive of osseous, connective tissue, and neurological structures, identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic etiologies of osseous derangement. Differentially diagnosing various arthritic changes vs. benign and metastatic Tumors.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland

University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Hip, *Identifying normal anatomy on both MRI and x-ray, inclusive of osseous, connective tissue, and neurological structures. Identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic etiologies of osseous derangement.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Hip, *Identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic changes vs. benign and metastatic Tumors.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Knee, *Identifying normal anatomy on both MRI and x-ray, inclusive of osseous, connective tissue, and neurological structures. Identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic etiologies of osseous derangement.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Knee, *Identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic changes vs. benign and metastatic Tumors.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Hand, *identifying normal anatomy on both MRI and x-ray, inclusive of osseous, connective tissue, and neurological structures, identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic etiologies of osseous derangement. Differentially diagnosing various arthritic changes vs. benign and metastatic Tumors.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Extremity MRI & Xray Interpretation of the Foot, *identifying normal anatomy on both MRI and x-ray, inclusive of osseous, connective tissue, and neurological structures, identifying fractures in the adult and pediatric cases. Differentially diagnosing various arthritic etiologies of osseous derangement. Differentially diagnosing various arthritic changes vs. benign and metastatic Tumors.* PACE Approved for the Federation of Chiropractic Licensing Boards, Cleveland University Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 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 triaging 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 spinal lesions and the necessity for urgent vascular, neurological intervention, collaborating 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

Pathobiomechanics and Documentation, *CPT Coding Guidelines for Initial and Established Patients with particular attention paid to Patient History, Review of Systems, Social and Family History, Physical Examination, and Medical Decision making. Specific differences in coding levels and required elements for a 99202-99203-99204-99205.* Academy of Chiropractic Post-Doctoral Division, Cleveland University Kansas City, Long Island, NY, 2020

Using Documentation and Ethical Relationships, *Pathways to improve coordination of care, and interprofessional communication with collaborating physicians. Maintaining ethical relationships in the medical-legal community through documentation and communication of demonstrable diagnosis, prognosis and treatment plans.* Academy of Chiropractic Post-Doctoral Division, Cleveland University Kansas City, Long Island, NY, 2020

Spinal Biomechanical Engineering Clinical Application, *History of clinical biomechanics with an emphasis on the diagnosis and management of spine pain of mechanical/functional origin. Evidence-based symptomatic vs. asymptomatic parameters using peer-reviewed medical index literature. Computerized mensuration analysis of spinal biomechanical pathology. Comparison of demonstrable spinal biomechanical failure on imaging to clinical evaluation and physical*

examination. Academy of Chiropractic Post-Doctoral Division, Cleveland University Kansas City, Long Island, NY, 2020

Spinal Biomechanical Engineering Clinical Grand Rounds, *Case reviews utilizing E/M, MRI, and x-ray mensuration report to conclude an accurate diagnosis, prognosis, and treatment plan. Common diagnosis requiring interprofessional collaboration with a discussion of diagnostic dilemmas and proper communication methods.* Academy of Chiropractic Post-Doctoral Division, Cleveland University Kansas City, Long Island, NY, 2020

Electrodiagnostics: 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, 2020

Electrodiagnostics: 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, 2020

Electrodiagnostics: 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, 2020

Electrodiagnostics: 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, 2020

Electrodiagnostics: 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, 2020

Forensic Documentation-Report Writing, *Report writing in a medical-legal case inclusive of causality, bodily injury, persistent functional loss and restrictive sequela from trauma. Demonstratively documenting bodily injury utilizing models, graphs and patient image of x-ray and advanced imaging.* Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Forensic Documentation- Demonstrative Documentation, *demonstratively reporting spinal biomechanical failure and spinal compensation. How in a medical-legal environment to ethically report pre-existing injuries vs causally related current injuries and what is permissible in a legal proceeding.* Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Forensic Documentation- Reporting Direct Opinions, *Causality, bodily injury and persistent functional losses documented and reported in a medical-legal environment as your direct opinion. Avoiding hearsay issues to ensure ethical relationships.* Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Forensic Documentation- Initial, Final and Collaborative Reporting, preparing *demonstrative documentation in a medical-legal case ensuring that you are familiar with all other treating doctor's reports. Correlating your initial and evaluation and management (E&M) report and your follow-up E&M reports with the narrative upon maximum medical improvement documenting continuum of care.* Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Forensic Documentation- Qualifications and Preparation of Documentation, *how to prepare your documentation for courtroom testimony and ensuring your qualifications are documented properly on an admissible, professional curriculum vitae. How to include indexed peer-reviewed literature in medical-legal documentation,* Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Forensic Documentation- Reporting Patient History and Credentials, preparing *patient history in a medical-legal case based upon your initial intake forms and understanding the work, social, academic, household and social activities of your patient. Understanding and explaining your doctoral and post-doctoral credentials in the courtroom.* Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Forensic Documentation- Reporting Chiropractic Care and Injured Anatomy, *preparing demonstrative documentation in a medical-legal case to report the bodily injuries of your*

patients, inclusive of loss of function and permanent tissue pathology. Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Forensic Documentation- Reporting Temporary vs. Permanent Issues, *preparing documentation in a medical-legal case ensuring that you can communicate permanent vs. temporary functional losses and permanent vs. temporary tissue pathology. How to maintain and explain ethical relationships in medical-legal cases,* Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Forensic Documentation- Reporting Bodily Injury, *how to report bodily injury and functional losses as supported by your credentials in a medical-legal case. Clinically correlating causality and permanent tissue pathology as sequela to trauma,* Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Forensic Documentation- Record Review and Documentation Reporting, *how to report records of collaborative treating doctors and communicating your scope of practice in the management of your case. How to ethically report your role as a doctor in medical-legal cases,* Cleveland University, Kansas City, Academy of Chiropractic, Post-Doctoral Division, Long Island, NY, 2020

Handling Traumatic Brain Injury Cases, *An Overview of Traumatic Brain Injuries, Brain Injury Updates and the Evolution of Science and Understanding: An Interactive and Creative Approach, Neurology and Images of Traumatic Brain Injuries.* Trial Guides, Orlando, FL, 2019

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 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 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 innovations 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

Documentation, Carrier Mandates and How the Guide ER and Lawyer Referrals, *Documenting electrodiagnostics, concussion and disc pathology as reflective of clinical findings when collaborating with medical specialists in private practice and hospital settings or in the medical-legal arena. Ensuring complete documentation in the evaluation and management process for both the initial and re-evaluation processes.* 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, 2019

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, 2019

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, 2019

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 standard. Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2019

Proper Management of Selected Conditions, Review of musculoskeletal related Conditions relevant to the cervical, thoracic and lumbar spines. NYCC/PG, Flushing, NY, 2019

Patient Communications – How Can You Say It So They Hear It, Effective doctor-patient communication, personality types and how to identify and best communicate with different types of people, and strategies for overcoming various communication issues. NYCC/PG, Flushing, NY, 2019

NYSCA Spring Convention 2019, Coding and Billing Audits: What Chiropractors Need to Know, No-Fault Arbitration: Why and How, NYS Workers' Compensation: How to Properly Evaluate, Treat, and Document, Ethics in the Chiropractic Office, Risk Management Strategies for the DC, Symptomatic vs Asymptomatic Pathological Lumbar Discs: Epigenetic Considerations, Evidence Based Practice, Patient and Doctor Communication & Professional Boundaries, Combating Sexual Harassment in the Workplace, Gait and Cognition: Defined, Understood, and Trained – Part 1. NYCC/PG, Flushing, NY, 2019

No-Fault and Workers' Compensation Insurance: A guide to Claim Preparation and Compliance, Proper methods of maintaining correct compliance guidelines. NYCC/PG, Flushing, NY, 2019

Identifying and Managing the Sports-trauma Concussive Patient Presenting to Your Office: Performance Enhancing Diets, Recognize and identify the cellular and biomedical mechanism of Concussion: The Neurometabolic Cascade. NYCC/PG, Flushing, NY, 2019

Spinal Bio-Engineering Seminar, a course describing the structural and functional organization of the spinal-pelvic system. Fundamental and advanced concepts on spinal biomechanics are introduced by presenting a coherent spinal model describing normal segmental coupling, regional adaptation and global compensation. The clinical model is a structural and mechanical engineering approach based on x-ray physics, mathematics and statistical analysis. The normal movements of gait are integrated in this total biomechanical approach to explain spine distortion, predictable functional scoliosis and lumbar disc failure. Case studies are demonstrated to radiographic analyses and physical findings to determine clinical solutions and soft tissue rehabilitation. PACE Recognized by The Federation of Chiropractic Licensing Boards, Melville, 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. Texas Chiropractic College, 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. Texas Chiropractic College, 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.* Texas Chiropractic College, 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.* Texas Chiropractic College, 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 in stroke 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 orthopaedic 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

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, 2018

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, 2018

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 effects 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, 2018

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, 2018

NYSCA Spring 2018 Convention, *Breakthroughs in the Conservative Treatment of Concussion, AMPED: Achieve Maximum Performance Every day, learn to Document and Code like a Medicare Auditor, Patient Centered Care for Women's Health, Overcoming 5 Dysfunctions of Chiropractic, Ethical Use of Social Media Marketing, Scope Modernization and Your Practice.* NYCC/PG, Flushing, NY, 2018

Fats & Oils – The Good, The Bad and The Ugly, *understanding dietary facts and oils and how they affect metabolism and lipid profiles.* NYCC/PG, Flushing, NY, 2018

The Necessity, Efficacy & Ethics of Manipulation Under Anesthesia, *Understanding the risks and benefits of manipulation under anesthesia.* NYCC/PG, Flushing, NY, 2018

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, 2017

Orthopaedic Testing: Principles, Clinical Application and Triage, *Integration of orthopaedic 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 orthopaedic testing conclusions and developing a treatment plan 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

Orthopaedic Testing: Cervical Spine, *Integration of cervical orthopaedic 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 orthopaedic testing conclusions and developing a treatment plan 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

Orthopaedic Testing: Cervical Spine, *Integration of cervical orthopaedic 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 orthopaedic testing conclusions and developing a treatment plan 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

Orthopaedic Testing: Lumbar Spine, *Integration of lumbar orthopaedic 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 orthopaedic testing conclusions and developing a treatment plan 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

Orthopaedic Testing: Clinical Grand Rounds, how to integrate orthopaedic 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 orthopaedic testing as a critical part of the evaluation and screening process. How to integrate orthopaedic 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 orthopaedic testing as a critical part of the evaluation and screening process. 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

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.* 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, New York, 2017

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.* 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, New York, 2017

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.* 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, New York, 2017

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.* 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, New York, 2017

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.* 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, New York, 2017

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.* 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, New York, 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

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, 2017

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, 2017

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, 2017

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, 2017

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 analysing 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, 2017

Spinal Biomechanical Engineering: Cervical Digital Analysis, *Digitizing and analysing 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 analyse 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, 2017

Spinal Biomechanical Engineering: Lumbar Digital Analysis, *Digitalizing and analysing 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, 2017

Spinal Biomechanical Engineering: Full Spine Digital Analysis, *Digitalizing and analysing 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, 2017

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

Anatomy of a Chiropractic Malpractice Case, Raising the clinician's awareness of how to avoid malpractice. NYCC/PG, Flushing, NY, 2017

NYSCA 2017 Spring Convention, *Clinical Interventions, Recordkeeping/Documentation, Insurance Reporting/Procedures, Physical Therapy/Physiological Therapeutics*. NYCC/PG, Flushing, NY, 2017

Guide to Performing Deep Tendon and Muscle Stretch Reflexes: Part 1, *Instructing the clinician to accurately elicit deep tendon and muscle stretch reflexes*. NYCC/PG, Flushing, NY, 2017

The Consequences of Inactivity, *The detrimental effects of lack of exercise and mobility on the human body*. NYCC/PG, Flushing, NY, 2017

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, PACE Recognized by the Federation of Chiropractic Licensing Boards, Melville, NY, 2016

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. PACE Recognized by the Federation of Chiropractic Licensing Boards, Melville, NY, 2016

Intermittent Fasting, *Discussion of how intermittent fasting reduces inflammation in the body*. New York Chiropractic College, Flushing, NY, 2016

Magnesium – What Every Chiropractor Should Know, *Discussion and protocol of magnesium and how it relates to muscle spasm, pain and fatigue*. New York Chiropractic College, Flushing, NY 2016

Understanding Concussions; Evaluation & Management, *Discussion and management of protocol for concussion and concussion related symptoms*. New York Chiropractic College, Flushing, NY, 2016

Sarcopenia – What Every Chiropractor Should Know, *Discussion regarding why age related muscle loss is important and how to prevent it*. New York Chiropractic College, Flushing, NY, 2016

Understanding How HIPAA and the HITECH Act of 2009 Affect Your Practice, *Discussion regarding protecting patient's privacy*. New York Chiropractic College, Flushing, NY, 2016

Properly Documenting and Ordering Diagnostic Studies, *Protocol for ordering diagnostic studies of patients*. New York Chiropractic College, Flushing, NY, 2016

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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 sequellae, including bulge, herniation, protrusion, extrusion and sequestration.* Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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.* Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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.* Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

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.* Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2015

“Deceleraging” – What the Aging Chiropractor May Want to Know, *Research and protocol for anti-aging.* New York Chiropractic College, Flushing, NY, 2015

ICD-10 Recordkeeping, Documentation and Compliance Seminar, *Discussion following the protocols of proper coding.* New York Chiropractic College, East Elmhurst, NY, 2015

Practicing in New York: How to Maintain Compliance with Legal Issues Confronting Chiropractors, *Discussion of following proper legal issues in New York State for a chiropractor*. New York Chiropractic College, Flushing, NY, 2015

Stand Up For Health, *Discussion of structural and metabolic consequences of chronic sitting*. New York Chiropractic College, Flushing, NY, 2014

Adiposopathy – What Every Chiropractor Should Know, *Discussion of metabolic syndrome and how it increases the risk of cardiovascular disease and diabetes*. New York Chiropractic College, Flushing, NY, 2014

Laboratory Assessment for the Chiropractor, *Protocols and educating the chiropractor on how to order blood work in New York State*. New York Chiropractic College, Flushing, NY, 2014

Nutritional Counselling in Chiropractic Settings: *Vital Information Regarding the Marketing and Dispensing of Dietary Supplements. (Discussion regarding the integrating of nutritional protocols in a chiropractic practice)* New York Chiropractic College, Bayside, NY, 2014

Chiropractic Rehabilitation; Why it needs to be in Today's Chiropractic Practice, *Protocol and management of patients with active therapy care*. New York Chiropractic College, Flushing, NY, 2014

The Sacroiliac Joint: Treatment Options, *Discussion of management and treatment protocols for the sacro-iliac joint*. New York Chiropractic College, Flushing, NY 2013

What Every Doctor Should Know About EMG/NCV Testing, *Discussion and protocol of ordering an NCV/EMG test*. New York Chiropractic College, Flushing, NY 2013

MRI Interpretation of Spinal Cord, Spinal Disc and Spinal Canal Disorders, *MRI interpretations of herniated, protruded, extruded, bulged and sequestered discs and spinal stenosis as sequella of liagamentous hypertrophy, congenital malformations, spinal cord pathology. Clinical necessity and contraindications*. Robert Peyster MD, DABR, CAQ-NR, Neuroradiologist, CMCS Post-Doctoral Division, New York Chiropractic Council, New York State Department of Education, Ronkonkoma, NY, 2009.

AMA Guides to the Evaluation of Permanent Impairment 6th Edition, *Clinically coordinating spinal pathology with neurological and functional sequela including station and gait, migraines, sexual dysfunction, sleep and arousal disorders, paroxysmal disorders, radiculopathic disorders and central nervous system disorders*. CMCS Post-Doctoral, New York Chiropractic Council, New York State Department of Education, Ronkonkoma, NY, 2009

MRI Interpretation of Herniated Disc and Spinal Cord and Root Encroachment, *MRI interpretation of herniated, protruded, extruded, bulged, and sequestered discs and their relationship to the spinal nerve roots and the clinical correlation to spinal adjustments, manual spinal therapy and joint mobilization*. Magdy Shady MD, Neurosurgeon, Nero-Trauma Surgery,

CMCS Post-Doctoral Division, New York Chiropractic Council, New York State Department of Education, Ronkonkoma, NY, 2009

MRI Normal Anatomy & Protocols, *Spinal anatomy of all MRI views utilizing T1, T2, 3D gradient, stacking and STIR sequences of imaging. Advanced protocols of MRI examination with multiple sequences to create concurrent diagnostic findings.* CMCS Post-Doctoral Division, New York Chiropractic Council, New York State Department of Education, Board for Chiropractic, Robert Peyster MD, DABR0NR, Neuroradiologist, Ronkonkoma, NY, 2009

MRI Disc & Spinal Cord and Spinal Canal Pathology, *MRI interpretation of spinal disc pathologies as a result of trauma and degenerative factors and resultant neurological compromise. Spinal cord and spinal canal pathologies and space occupying lesion interpretation.* CMCS Post-Doctoral Division, New York Chiropractic Council, New York State Department of Education, Board for Chiropractic, Robert Peyster, MD, DABR-NR, Neuroradiologist, Ronkonkoma, NY, 2009

Accident Reconstruction and Ensuing Bodily Injury, *Understanding the forces involved in crashes and the transference of those forces from the bullet car to the target car. Quantifying those forces to determine bodily injury and calculating speed, distance, time and drag factors, determining causality and direction of forces.* CMCS Post-Doctoral Division, New York Chiropractic Council, New York State Department of Education, Board for Chiropractic, Ronkonkoma, NY, 2009

Neurodiagnostics, Imaging Protocols and Pathology of the Trauma Patient, *An in-depth understanding of the protocols in triaging and reporting the clinical finds of the trauma patient. Maintaining ethical relationships with medical-legal community.* CMCS Post-Doctoral Division, New York Chiropractic Council, New York State Department of Education Board for Chiropractic, Long Island, NY, 2008

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, 2008

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, 2008

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, 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, 2008

Neurodiagnostic Testing Protocols, Physiology and Indications for the Trauma Patient, *Electromyography (EMG), Nerve Conduction Velocity (NCV), Somato Sensory Evokes Potential (SSEP), Visual Evoked Potential (VEP), Brain Stem Auditory Evokes Potential (BAER) and Visual-Electrooculography (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, 2008

Documentation and Reporting for the Trauma Victim, *Understanding the necessity for accurate documentation and diagnosis utilizing the ICD-96 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, 2008

Documenting Clinically Correlated Bodily Injury to Causality, *Understanding the necessity for accurate documentation, diagnosis and clinical correlation to the injury when reporting injuries 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, 2008

SELECTED PUBLICATIONS

Lefcort, L.J. (2016) Traumatic Ligament Laxity of the Spine and Associated Physical Impairment, Understanding of damage to ligaments due to trauma and its ramifications, The New York State Trial Lawyers Institute, Bill of Particulars, (1), 77-80.

SELECTED MEMBERSHIPS

New York State Chiropractic Association, Member, 1982 - Present

SELECTED HONORS AND AWARDS

Academy of Chiropractic, 2009 – Present

New York State Pain Society, 2017 – 2019