David R. Gibson, DC, DAAPM, DAAMLP

Greensboro Accident & Injury Chiropractic **(336) 274-2520**
526 North Elam Avenue, Suite 101 ***fax* (336) 274-2528**
Greensboro, NC 27403 **DavidGibson@triad.rr.com**

SELECTED OCCUPATIONAL HISTORY

Graduate Medical Educator, The State University of New York at Buffalo, Jacobs School of Medicine and Biomedical Sciences.

Trauma Team Member, Academy of Chiropractic, Cleveland University-Kansas City, Chiropractic and Health Sciences, Long Island NY, 2018-present

Private Practice, Greensboro Accident & Injury Chiropractic, NC, 1997- Presently

Staff Doctor, Accident & Injury Chiropractic, Garland, TX, 1996

Staff Doctor, West Dallas Metrex, Dallas, TX, 1995

Staff Doctor, Newton Chiropractic, Carrollton, TX 1994

EDUCATION and LICENSURE

Doctorate of Chiropractic, Parker Chiropractic College, Dallas, TX, 1994

Bachelor of Science in Mechanical Engineering, The Ohio State University, Ohio, 1986

Diplomate, American Academy of Pain Management

Diplomate, American Academy of Doctor of Chiropractic, Licensed in the State of North Carolina,

License # 2180, 1996-presently

Doctor of Chiropractic, Licensed in the State of Texas, License # 6190, 1994-1997

SELECTED CONTINUING EDUCATION

Spinal Biomechanical-Engineering, *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, Weldon Spring, MO, 2017

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.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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**

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.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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**

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.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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**

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.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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 sequellae, including bulge, herniation, protrusion, extrusion and sequestration.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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 vertebrate, Schmorl's nodes and herniations. Central canal and cauda equina compromise interpretation with management.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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-morbities 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 or PACE Reconized by The Federation of Chiropractic Licensing Boards], 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 vertebrate, Schmorl's nodes and herniations. Spinal cord and canal compromise interpretation with management.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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 or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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 or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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 reimburser's requirements for complete documentation.* **Texas Chiropractic College, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2017**

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.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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**

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.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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**

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.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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**

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.* **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards], 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**

Orthopedic Testing: Clinical Grand Rounds, *Integration of 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*. **[Texas Chiropractic College or PACE Recognized by The Federation of Chiropractic Licensing Boards],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, 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, 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 diagnoising 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, 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 analyzing a spine.* **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, 2017**

Spinal Biomechanical Engineering: Cervical Digital Analysis, Digitizing *and analyzing the cervical spine in neutral, flexion and extension views to diagnose pathobiomechanics. This includes alteration of motion segment integrity (AMOSI) in both angular and translational movement. Ligament instability/failure/pathology are identified all using numerical values and models. Review of case studies to analyze pathobiomechanics using a computerized/numerical algorithm.* **Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, 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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2017**

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 rotatioal 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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2017**

Spinal Biomechanical Engineering: Full Spine Digital Analysis, *Digitalizing and analyzing the full spine images to diagnose pathobiomechanics as sequellae to trauma in relation to ligamentous failure and disc and vertebral pathology as sequellae. This includes anterior and posterior vertebral body elements in rotatioal 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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, 2017**

Establishing Roles and Responsibilities for Interprofessional Care Team Members, *Defining roles in a collaborative environment based upon skills, knowledge and abilities of each provider while engaging patients in the process***, Accreditation Council on Continuing Medical Education (ACCME) in cooperation with Medscape, 2016**

Interprofessional Collaboration to Improve Health Care: An Introduction, *Creating patient centered approaches to healthcare to improve outcomes in treatment models while concurrently reducing risk***, Accreditation Council on Continuing Medical Education (ACCME) in cooperation with Medscape, 2016**

Understanding the Values and Ethics of Interprofessional Collaboration, *Developing ethical Interprofessional relationships in a patient centered paradigm to ensure better outcomes while considering cultural and personal diversity needs of patients***, Accreditation Council on Continuing Medical Education (ACCME) in cooperation with Medscape, 2016**

Interprofessional Communication: How Can It Improve Healthcare? *The best practices in Interprofessional communication and optimizing the tools in clinical practice to benefit patient outcomes***, Accreditation Council on Continuing Medical Education (ACCME) in cooperation with Medscape, 2016**

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2016**

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2016**

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2016**

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2016**

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2016**

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, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, New York, 2016**

Primary Spine Care – Central Nervous System Processing of Pain and Physiology, *Central neural pathways of pain and higher cortical responses to pain and the effect of high amplitude-low velocity forces on mechanoreceptors and proprioceptors. The effects of neuropeptides on the hypothalamus, pituitary and adrenal axis when treating patients.* **Texas Chiropractic College, Academy of Chiropractic, Academy of Chiropractic, Recognized by the PACE Program of the Federation of Chiropractic Licensing Boards, 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, Academy of Chiropractic, Recognized by the PACE Program of the Federation of Chiropractic Licensing Boards, Melville NY, 2016**

Primary Spine Care – Hospital and Emergency Room Care, *Identifying spinal lesions inclusive of cord and root lesion through examination and advanced imaging in creating an accurate diagnosis, prognosis and treatment plan to effectively triage in collaboration and coordination with medical specialists and emergency department physicians. Differentially diagnosing and triaging disc degenerative bulges, traumatic disc bulges, protrusion herniations, extrusion herniations and fragmented herniations along with managing traumatically induced pain as sequella to degenerative disc trauma,* **Texas Chiropractic College, Academy of Chiropractic, Academy of Chiropractic, Recognized by the PACE Program of the Federation of Chiropractic Licensing Boards, Melville NY, 2016**

Cervical Trauma, Evaluation, and Treatment Following MVA. *Examination and Triage of soft tissue injury secondary to motor vehicle accident trauma. Appropriate treatment protocols. Long term effects of soft tissue injury and wound repair.* **Life Chiropractic College, Atlanta, Ga**

Mechanical Diagnosis & Therapy: The Lumbar Spine, *Epidemiology and predisposing factors, Chemical vs. mechanical pain, Pain and connective tissue properties,Anatomical considerations related to mechanical diagnosis and therapy,Diagnosis through repetitive movements, Examination and treatment: postural, dysfunction, and derangement syndromes, Anatomy and biomechanics:the intervertebral disc, Prophylaxis and contraindications, Patient models, analysis and discussion.* **McKenzie Institute, Syracuse, NY**

Compliance, Documentation, Ethics, Sexual Boundaries, and North Carolina Jurisprudence, *Examination of ethical principles and a comparative analysis of morals and ethics, Examination of professional boundaries and professional boundary crossings and violations, Transference and Countertransference in the doctor-patient relationship, NCBCE rules and regulations, Coding Systems, Chiropractic Documentation, Writing subjective complaints, objective findings, assessment and plan.* **Texas Chiropractic College, Houston, Tx**

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.* **CMCS Post Doctoral Division, New York Chiropractic Council, New York State Department of Education, Board for Chiropractic, Long Island, NY**

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.* **CMCS Post Doctoral Division, New York Chiropractic Council, New York State Department of Education, Board for Chiropractic, Long Island, NY**

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.* **CMCS Post Doctoral Division, New York Chiropractic Council, New York State Department of Education, Board for Chiropractic, Long Island, NY**

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.* **CMCS Post Doctoral Division, New York Chiropractic Council, New York State Department of Education, Board for Chiropractic, Long Island, NY**

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

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

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 Management Post Doctoral Division, New York Chiropractic Council, New York State Education Department Board for Chiropractic, Long Island, NY**

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, Newton's Law, 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 Management Post Doctoral Division, New York Chiropractic Council, New York State Education Department Board for Chiropractic, Long Island, NY**

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

Neurodiagnostic Testing Protocols, Physiology / 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, protcols and clinical indications for the trauma patient***, CMCS Management Post Doctoral Division, New York Chiropractic Council, New York State Education Department, Board for Chiropractic, Long Island NY**

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

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 kinesiopathology, myopathology, neuropathology, pathophysiology in both functional and structural paradigms,* **CMCS Management Post Doctoral Division, New York Chiropractic Council, New York State Education Department, Board for Chiropractic, Long Island, NY**

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

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 sequella*. **New York Chiropractic Council, New York State Department of Education, Board for Chiropractic, AACME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and CMCS Post Doctoral Division, Buffalo, NY**

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

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

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

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

Training Strength, Endurance & Flexibility, *Fundamentals of Isometric and Isotonic Strength Training. Endurance Training. Flexibility Training: passive-passive assist-passive resist-active assist-active resist. Post-isometric relaxation: Reciprocal Inhibition. Soft Tissue Procedures.* **American Academy of Chiropractic Rehabilitation, University of Bridgeport College of Chiropractic, Bridgeport, Connecticut**

Treatment of Automobile Accident Injuries, *Review of Motor Vehicle Accident Statistics, Understand Cervical Whiplash Mechanism and Dynamics; Vehicle Crash Testing; Understand Cervical Spine Anatomy and Physiology; Head Trauma and Grading; Review Three Stages of Healing: Inflammatory, Repair, and Remodeling; Conservative Rehabilitation Procedures; Orthopedic and Neurological Evaluation of the Head, Spine, and Extremities; Understand Advanced Diagnostic Testing: CT, MRI, Bone Scan, EMG,* **Texas College of Chiropractic, Houston, Texas**

Evaluation of Posture, Strength and Endurance, Treatment Methods & Protocol, *Understanding McKenzie; posture, dysfunction, derangement, end-range loading. Stabilization Exercise; isometric co-contraction, co-contraction combined with arm/leg movements, rocker board/swiss balls.PNF; hold-relax/ contract-relax /contract-relax agonist contract. Proprioceptive Training; small foot, balance board/ balance shoes/ balls, styrofoam rolls, perturbations. Stretching; hypertonic muscles, facilitation techniques.* **American Academy of Chiropractic Rehabilitation, University of Bridgeport College of Chiropractic, Bridgeport, Connecticut**

Evaluating the Musculoskeletal System, Fitness, and ADL Recommendations. Gait Functional Analysis. *Understanding Muscular Strength Evaluations; manual muscle tests, multiple angle isometric, dynamic. Muscular Endurance Evaluation. Flexibility Evaluation; inclinometric (passive and active). Aerobic Fitness; heart rate, PAR-Q. ADL Demonstration/Advice;posture, sit (chairs/ergonomic), stand, sleep, pillows, mattress, lifting, carrying, push, pull.* **American Academy of Chiropractic Rehabilitation, University of Bridgeport College of Chiropractic, Bridgeport, Connecticut**

Stabilization Exercises for Injury. *Assessment Protocols Integrating Muscle/Joint Dysfunction/Motor Control; deep neck flexor, forward head, scapulo-humeral rhythm, arm elevation, hip extension/abduction, squat, balance, sway. Human Locomotions; gait analysis. Functional Testing of Isolated Muscles/Joints; Alaranta trunk flexion/extension patterns, squatting, spinal RON measurements. Evaluation of Muscle Imbalance; tight vs. weak, agonist vs. antagonist.* **American Academy of Chiropractic Rehabilitation, University of Bridgeport College of Chiropractic, Bridgeport, Connecticut**

Chiropractic Peer Review Essentials, *Fundamentals of the Peer Review Process. Peer review report writing format and skill development. State/ Regional/ National, Chiropractic, and cross discipline treatment guidelines. Deposition and court room testimony skill development. Insurance industry red flags,* **Texas Chiropractic College, Houston, Texas**

Fundamentals of Physiotherapy, *Comprehensive analysis of Physical Therapy Modalities. Physiological effects, indications, contraindication and proper dosage of physical therapy modalities. Spinal decompression protocols and guidelines,* **Texas Chiropractic College, Houston Texas**

Peer Review of Diagnostic Testing Procedures, *Plain film radiographs, MRI, CT Scan, Bone Scan, Myelography. Electrodiagnostic testing: EMG, NCV, SSEP,* **Texas Chiropractic College, Houston, Texas**

Rehabilitative Exercise Protocols, *Muscle anatomy and physiology. Understanding of exercise energy systems, progressive resistance exercise methodologies, aerobic/anaerobic exercise training concepts, rehabilitative exercise treatment protocols,* **Texas Chiropractic College, Houston, Texas**

Independent Chiropractic Examination, *Understanding of the Independent Chiropractic Examination Process. Establishing the diagnostic impression.Overview of the causal relation, apportionment, and permanent impairment. Independent Chiropractic Examination report writing and case presentation,* **Texas Chiropractic College, Houston, Texas**

Physical/ Orthopedic/ Neurological Examination, *Physical examination techniques and findings. Utilization of appropriate physical/ orthopedic/ neurologic/ chiropractic examination testing procedures. Independent Chiropractic Examination case presentation analysis,* **Texas Chiropractic College, Houston, Texas**

Documentation Principles, *Documentation methodologies to enhance third party reimbursement. Medicare/C.P.T. billing code analysis. Risk management strategies to prevent malpractice claims,* **Texas Chiropractic College, Houston, Texas**

Exercise Strength & Conditioning, *Understanding anatomy and physiology. Overview of exercise energy systems. Progressive resistance exercise methodologies. Aerobic/anerobic exercise training concepts. Rehabilitation exercise treatment protocols. Sport specific exercise strength training methods patient exercise program designs.* **Texas Chiropractic College, Houston, Texas**

Permanent Soft Tissue Injuries, *Understanding Dynamics of Accidents, Elasticity of Soft Tissue, Three Phases of Healing, Scar Tissue Formation, Altered Joint Function, Long Term Effects of Soft Tissue Injury,* **North Carolina Chiropractic Association, Raleigh, North Carolina**

SELECTED MEMBERSHIPS

American Academy of Medical Legal Professionals, 2009-Present

American Academy of Pain Management, 2009-Present

American Chiropractic Association, 2006, 2009-Present

North Carolina Chiropractic Association, 1997, 2001

International Chiropractic Pediatric Association, 2000