

Ted S. Showalter, DC

2605 Jenkins Rd. Suite 2, Chattanooga, TN 37421

Phone: 423-855-5053

Fax: 423-855-5856

chirodcs@yahoo.com

www.chirodc.com

SELECTED OCCUPATIONAL HISTORY

Chiropractor, Pinnacle Physical Medicine & Rehab, P.C., Chattanooga, TN, 2003 - Present

Chiropractor, Duff/Showalter Chiropractic, Chattanooga, TN, 2000 - 2003

Chiropractor, Showalter Chiropractic, Collegedale, TN, 1999 - 2000

Nurse, Irving Medical Center, Emergency Room, Irving, TX, 1996 - 1998

Nurse, Parkland Hospital, Emergency Room, Dallas, TX, 1994 - 1996

Nurse, Erlanger Medical Center, Emergency Room, Chattanooga, TN, 1992 - 1994

EDUCATION AND LICENSURE

Doctor of Chiropractic, Licensed in the State of Tennessee, License #1534, 1999- Present

Doctorate of Chiropractic, Parker College of Chiropractic, Dallas, TX, 1998

Internship, Parker College Clinic, Dallas, TX, 1997 - 1998

National Board of Chiropractic Examiners, Part IV, 1998

National Board of Chiropractic Examiners, Part III, 1997

National Board of Chiropractic Examiners, Part II, 1996

National Board of Chiropractic Examiners, Part I, 1996

Associates Degree in Nursing, Southern Adventist University, Collegedale, TN, 1992

SELECTED POST-GRADUATE EDUCATION

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.* PACE Approved for the Federation of Chiropractic Licensing Board, Academy of Chiropractic Post-Doctoral Division, Long Island NY, 2018

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

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

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

Medical-Legal Ethical Relationships, Documentation and Legal Testimony, *Report writing for legal cases, the 4 corners of a narrative and documenting damages with understanding defense medical documentation and consistent reporting of bodily injuries,* Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, Long Island NY, 2018

Medical-Legal Ethical Relationships, Documentation and Legal Testimony, Part 2, *Understanding report writing and the types of medical reports required for court inclusive of*

diagnosis, prognosis and treatment plans with requirements of reporting causality and permanency, Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, Long Island NY, 2018

Medical-Legal Ethical Relationships, Documentation and Direct Testimony, *Organizing your documentation and understanding all collaborative documentation and how it fits into your diagnosis, prognosis and treatment plan, Understanding the nuances of the functional losses of your patients related to their bodily injuries*, Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, Long Island NY, 2018

Medical-Legal Ethical Relationships, Documentation and Direct Testimony Part 2, *Utilizing demonstrative documentation in direct examination and communicating the results of your care concurrently with the written documentation and reporting an accurate diagnosis for all images*, Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, Long Island NY, 2018

Medical-Legal Ethical Relationships, Documentation and Direct Testimony Part 3, *The evaluation, interpretation and reporting of collaborative medical specialists results and concluding an accurate diagnosis inclusive of all findings and reviewing all images to ensure an accurate diagnosis*, Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, Long Island NY, 2018

Medical-Legal Ethical Relationships, Documentation and Direct Testimony Part 4, *Determining and documenting disabilities and impairments inclusive of loss of enjoyment of life and duties under duress and the evaluation and validation of pain and suffering*, Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, Long Island NY, 2018

Medical-Legal Ethical Relationships, Documentation and Cross Examination Testimony, *Reporting your documentation factually and staying within the 4 corners of your medical report and scope of practice inclusive of understanding how your credentials allow you to report your documentation*, Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, Long Island NY, 2018

Medical-Legal Ethical Relationships, A Documentation Relationship Between the Doctor and Lawyer, *The level of organization required in a medical-legal case that accurately reflects the bodily injuries of your patients and the time constraints in rendering an accurate report*, Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, Long Island NY, 2018

Medical-Legal Ethical Relationships, Report Writing and Preparing for a Legal Case, *Reviewing the facts of the case inclusive of your documentation, the defense medical examiner, medical*

specialists and the attorney to ensure accurate and consistent reporting, Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, Long Island NY, 2018

Medical-Legal Ethical Relationships, Report Writing and Preparing for a Legal Case, *Creating demonstrative evidence, visuals of your patient's bodily injuries inclusive of x-rays, MRI's, CAT Scans and electrodiagnostic findings, the spinal biomechanics of herniated disc with ipsilateral findings and contralateral symptomatology*, Academy of Chiropractic, Post-Doctoral Division, PACE approved of the Federation of Chiropractic Licensing Boards, Cleveland University-Kansas City, College of Chiropractic, 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*. 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, 2018

Stroke Anatomy and Physiology: Stroke Types and Blood Flow, *Various types of stroke identifying ischemia, hypoperfusion, infarct and penumbra zones and emboli. Cardiac etiologies and clinical features as precursor to stroke with associated paradoxical emboli and thrombotic etiologies. Historical and co-morbidities that have etiology instroke inclusive of diabetes, coagulopathy, acquired and hereditary deficiencies*. 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, 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*. 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, 2018

Clinical Evaluation and Protocols for Identifying Stroke Risk, *The neurological history and examination for identifying stroke risks with a focus on supra and infratentorial regions, upper and lower motor lesions, cranial nerve signs, spinal cord pathology, motor and sensory pathology and gait abnormalities. Examining genetic and family histories along with dissection risk factors. Stroke orthopedic testing and clinical guidelines pertaining to triage for the primary care provider*. 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, 2018

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, PACE Recognized by The Federation of Chiropractic Licensing Boards, 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, PACE Recognized by The Federation of Chiropractic Licensing Boards, 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, PACE Recognized by The Federation of Chiropractic Licensing Boards, 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, PACE Recognized by The Federation of Chiropractic Licensing Boards, 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. PACE Recognized by The Federation of Chiropractic Licensing Boards, Academy of Chiropractic Post-Doctoral Division, Melville NY, 2017*

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

Documentation and Evidence in a Medical-Legal Practice, *The role of scientific research conclusions with contemporary documentation to effectively support the necessity for clinically indicated care. The role of timely evaluations and re-evaluations in coordinating care inclusive of history, physical and evaluation report and concludes with the correlation of the SOAP Note and HCFA that correlates the conclusion of the evaluatory findings. Coordinating research and clinical findings with primary care providers and medical specialists in the rehabilitation process inclusive of insurance requirements and contemporary MRI research nomenclature*, PACE Recognized for the Federation of Chiropractic Licensing Boards, Boca Raton, FL, 2015

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*. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

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*. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

Impairment Rating Certification, The understanding and utilization of the protocols and parameters of the AMA Guide to the Evaluation of Permanent Impairment 6th Edition. Spine, neurological sequelae, migraine, sexual dysfunction, sleep and arousal disorders, station and gait disorders and consciousness are detailed for impairment rating. Herniated discs, radiculopathy, fracture, dislocation and functional loss are also detailed in relation to impairment ratings. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

MRI Interpretation of Cervical 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. Spinal cord and canal compromise interpretation with management. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

MRI Protocols Clinical Necessity, MRI slices, views, T1, T2, STIR axial, stacking, FFE, FSE and sagittal images. Clinical indication for the utilization of MRI and pathologies of disc in both trauma and non-trauma sequelae, including bulge, herniation, protrusion, extrusion and sequestration. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

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. Federation of Chiropractic Licensing Boards, Board for Chiropractic, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

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. Federation of Chiropractic Licensing Boards, ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Buffalo, NY, 2013

Spinal Biomechanical Engineering, Differential diagnosis of pathobiomechanics in the cervical, thoracic and lumbar spine as sequellae to micro and macro trauma and chronic biomechanic instabilities. Understanding the clinical implications of long term biomechanical failure in resultant disc pathology, ligament pathology and osseous pathology. Federation of Chiropractic Licensing Boards, Academy of Chiropractic Post Doctoral Division, Boca Raton, FL, 2013

MRI Spine Interpretation, Bulge, herniated, protruded, extruded, sequestered discs, differential diagnoses and clinical triage implications. MRI physics and slice protocols. Federation of Chiropractic Licensing Boards, Academy of Chiropractic Post Doctoral Division, Boca Raton, FL, 2013

A Brave New World: Using Functional Laboratory Evaluations in Clinical Practice, Explore the importance of lab work and functional medicine for the clinic. How to successfully implement it into your practice. Tennessee Chiropractic Association, Franklin, TN, 2012

The Evidence Based War... And How You Can Win! , Includes Case Management, Cost Effectiveness Research and Guidelines, and Acute and Chronic Care Guidelines based on research. Tennessee Chiropractic Association, Franklin, TN, 2012

Chiropractic Management of Head and Neck Injury, On field examination of sports injuries, concussion management and lower extremity examination. Tennessee Chiropractic Association, Franklin, TN, 2012

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 . Academy of Chiropractic Post Doctoral Division, New Jersey State Board of Chiropractic Examiners, Long Island, New York, 2012

Physical Examination & Documentation for 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. Academy of Chiropractic Post Doctoral Division, New Jersey State Board of Chiropractic Examiners, Long Island, New York, 2012

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. Academy of Chiropractic Post Doctoral Division, New Jersey State Board of Chiropractic Examiners, Long Island, New York, 2012

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. Academy of Chiropractic Post Doctoral Division, New Jersey State Board of Chiropractic Examiners, Long Island, New York, 2012

MRI, Bone Scan and X-Ray Protocols, Physiology and Indications for the Trauma Patient, MRI, Bone Scan and X-Ray Protocols, Physiology and Indications for the Trauma Patient, MRI interpretation, physiology, history and clinical indications, bone scan interpretation, physiology and clinical indications, x-ray clinical indications for the trauma patient. Academy of

Chiropractic Post Doctoral Division, New Jersey State Board of Chiropractic Examiners, Long Island, New York, 2012

Documenting Clinically Correlated Bodily Injury to Causality, *Understanding the necessity for accurate documentation, diagnosis and clinical correlation to the injury when reporting injuries in the medical-legal community. Documenting the kinesio pathology, myopathology, neuropathology, and pathophysiology in both a functional and structural paradigm.* Academy of Chiropractic Post Doctoral Division, New Jersey State Board of Chiropractic Examiners, Long Island, New York, 2012

Neurodiagnostics Testing: EMG/NCV, VEP, BAER, V-ENG and SSEP, Clinical Indications and Interpretation, *Neurodiagnostic Testing Protocols, Physiology and Indications for the Trauma Patient, Electromyography (EMG), Nerve Conduction Velocity (NCV), Somato Sensory Evoked Potential (SSEP), Visual Evoked Potential (VEP), Brain Stem Auditory Evoked Potential (BAER) and Visual-Electronystagmosgraphy (V-ENG) interpretation, protocols and clinical indications for the trauma patient .* Academy of Chiropractic Post Doctoral Division, New Jersey State Board of Chiropractic Examiners, Long Island, New York, 2012

Key Techniques Proven to Increase your Clinical Results, *A 19 step approach to getting patients well and keeping them well with nutrition, exercise and stretching.* Tennessee Chiropractic Association, Murfreesboro, TN, 2011

An Overview of the Upper and Lower Extremities, *The advanced clinical instruction in the treatment of conditions associated with the upper and lower extremities.* Tennessee Chiropractic Association, Murfreesboro, TN, 2011

Imaging Pitfalls and Challenges: Spinal Transitional Areas, *What, why and when to select a specific imaging modality for a particular clinical presentation.* Tennessee Chiropractic Association, Murfreesboro, TN, 2011

Today's Formula for Complete Health = Chiropractic + Nutrition + Neurology, *Mechanoreception, spinal cord reflexes, and suprasegmental relays. Neurology of the subluxation, including the neuroanatomy to support pain control and visceral influences.* Tennessee Chiropractic Association, Nashville, TN, 2010

Functional and Kinetic Treatment with Rehab, Provocation and Motion, *Treatment of injuries while patient is functioning, not simply in a static posture. Looking at the kinetic chain when assessing for any soft tissue injury.* Tennessee Chiropractic Association, Nashville, TN, 2010

Practical Spinal and Extremity Analysis and Adjusting for the Clinical Chiropractor, *How to assess, understand and be able to explain to your patients the role the feet and the lower extremity play in biomechanical and anatomical stability. Adjusting, taping, and rehabilitation activities to teach you how to help your patients in your own practice* Information about gait

cycle, common lower extremity conditions and how to identify them in your patients. Tennessee Chiropractic Association, Nashville, TN, 2010

21st Century Chiropractic: Clinical Lessons from the Trenches, *Important lessons about proper examination and treatment, risk management, and interprofessional relations.* Tennessee Chiropractic Association, Murfreesboro, TN, 2009

Living Well by Living Right – Chiropractic Neurology, *Subtleties of brain dysfunction as well as the other more commonly seen disorders. Special emphasis given to the prefrontal cortex and the empathic abilities of the practicing chiropractor.* Tennessee Chiropractic Association, Murfreesboro, TN, 2009

Empower Your Patients with Active Care – The Standard for Excellence, *Objectively assessing and documenting the functional outcomes of your care. Active care codes: therapeutic exercises, kinetic activities, neuromuscular reeducation and others.* Tennessee Chiropractic Association, Murfreesboro, TN, 2009

A Chiropractic Perspective of Pharmaceuticals, *Avoid the foods that are known to cause inflammation and pain in the first place and reduce your need for aspirin, pain medication and other anti-inflammatory drugs.* Tennessee Chiropractic Association, Murfreesboro, TN, 2009

The Ideal Practice: Achieving Excellent Clinical Outcomes, *Qualities, characteristics and traits that result in an ideal practice. Beliefs values and mindset the doctor of chiropractic must have to create their ideal practice.* Tennessee Chiropractic Association, Nashville, TN, 2008

Core Principles Essential for Chiropractic Practice, *The 17 core ideologies and principles that are essential for creating an ideal practice and ideal life in today's ever changing health care climate.* Tennessee Chiropractic Association, Nashville, TN, 2008

Discover Wellness, *Medical and independent studies and references showing the dramatic shift in our culture and society and how it impacts each doctor of chiropractic.* Tennessee Chiropractic Association, Nashville, TN, 2008

Structural management program, *The concept of whole body care in relation to standard chiropractic. Examination procedures, treatment options, office implementation and relevant insurance coding that address the needs of the patient.* Tennessee Chiropractic Association, Nashville, TN, 2008

Evidence Based Practice 101, *The meaning, utility and limitations of evidence in influencing clinical practice. How to construct a searchable clinical question and have strategies for conducting a search. How to critically evaluate the biomedical literature. Understand how statistical measures for reliability are utilized. How diagnostic tests are calculated and their use in clinical practice.* Tennessee Chiropractic Association, Nashville, TN, 2008

Multiple Condition Diagnosis & Treatment Protocols Through SOT/Cranial Applications, *Use of SOT/cranial techniques to help with common patient complaints*. Texas Chiropractic College, Chattanooga, TN, 2006

Applied Neurology, *Use of neurologic findings for specific treatment of patients*. Logan College of Chiropractic, Nashville, TN, 2005

Integrating Chiropractic and Posture Rehab Exercises, *Focused motion exercise protocols using inexpensive posture balls and other low-tech tools. Current, research documented concepts of posture, motion, exercise and chiropractic to easily incorporate into your practice. Integrating exercise and active care along with chiropractic is essential for an outcome oriented practice. Progressive core stabilization exercises will increase patient participation and improve results as well as retention*. University of Bridgeport College of Chiropractic, Chattanooga, TN, 2004

Cox Distraction Manipulation for Lumbar and Cervical Spine, *The use of natural spinal pain management and the proper application of Cox Technique spinal manipulation according to the evidence-based protocols developed in conjunction with chiropractic researchers and research efforts involving chiropractic and medical facilities*. National University of Health Science, Arlington, VA, 2004

Extremity Adjusting, *Basic biomechanics, neurology, examination procedures, indicators, and adjusting protocols for the most common subluxation patterns of the feet, wrists, elbows, and shoulders that are found in the typical practice*. Parker College of Chiropractic, Dallas, TX, 2001

The Integration of Nutritional & Herbal Supplements in Clinical Practice, *Applying nutritional and herbal supplementation for common patient complaints*. Parker College of Chiropractic, Dallas, TX, 2001

Eight Modifiable Risk Factors of Unhealthy Aging, *Assessing the risk factors for aging and teaching patients how to avoid in commonsense ways*. Parker College of Chiropractic, Dallas, TX, 2001

Ethics, Risk Management and Jurisprudence, *Professional boundaries, risk management, and jurisprudence*. Tennessee Chiropractic Association, Nashville, TN, 2000

SELECTED TEACHING/INSTRUCTING/LECTURING/CONSULTING

Clinical Instructor, Nursing Clinicals, Southern Adventist University, Collegedale, TN, 1999 - 2000

SELECTED MEMBERSHIPS

Academy of Chiropractic, Member, 2012 - Present

Tennessee Chiropractic Association, Member, 1999 - Present

American Chiropractic Association, Member, 1999 - Present

SELECTED COMMUNITY SERVICE

Samaritan Center, Donator, Ooltewah, TN, 1999 - Present